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ABSTRACT

This document is a comprehensive report a subregional seminar for eastern and southern African countries on the Jua Kali movement. (Jua Kali, "hot sun" in Swahili, refers to the informal or nonformal sector of the economy.) Section 1 explains the role of the International Project on Technical and Vocational Education (UNEVOC) in the development of technical and vocational education and training (TVET). The following opening and closing speeches are provided in Section 2: "Introductory Statement" (R. Barry Hobart); "Opening Speech" (Shem Wandiga); and "Closing Speech" (S.M. Kyungu). Section 3 is an overview of the discussion and debate, and Section 4 lists recommendations regarding development of national strategies for TVET. The following papers are presented in Section 5: "Technical and Vocational Education and Training Policy in Kenya" (Peter O. Okaka); "A Position Paper" (B. Wanjala Kerre); "TVET beyond the Formal Sector in Botswana" (K. Kabecha, M. M. Kewagamang); "Existing Set-Up in Ethiopia" (Mesfin Terefe); "Brief Description of the Jua Kali Movement in Kenya" (G.K.N. Mbugua); "Non-Government Organisations and Enterprise in Lesotho" (Mota Sekonyela); "The National Policy Definition in Malawi" (Joyce Phekani, Maston M. Mtambo); "Beyond the Formal Sector in Mauritius" (Feroze Coowar); "An Effective System for Non-Formal TVET in South Africa" (Siphamandla I. Xulu); "Essential Features of the Non-Formal Sector in Swaziland" (William S.A. Shongwe); "TVET at Mwanza Rural Housing Programme in Tanzania" (Lunogelo L. Sakafu); "A Case for Uganda" (Ben M. Manyindo); and "Training for the Informal Sector in Zambia" (Joseph S. Mukuni, Joseph P. Kalunga). Appended are the following: daily schedule, background information about the seminar, list of main seminar participants, and text of the convention on technical and vocational education adopted by the General Conference of the United Nations Educational, Scientific and Cultural Organization. (MN)

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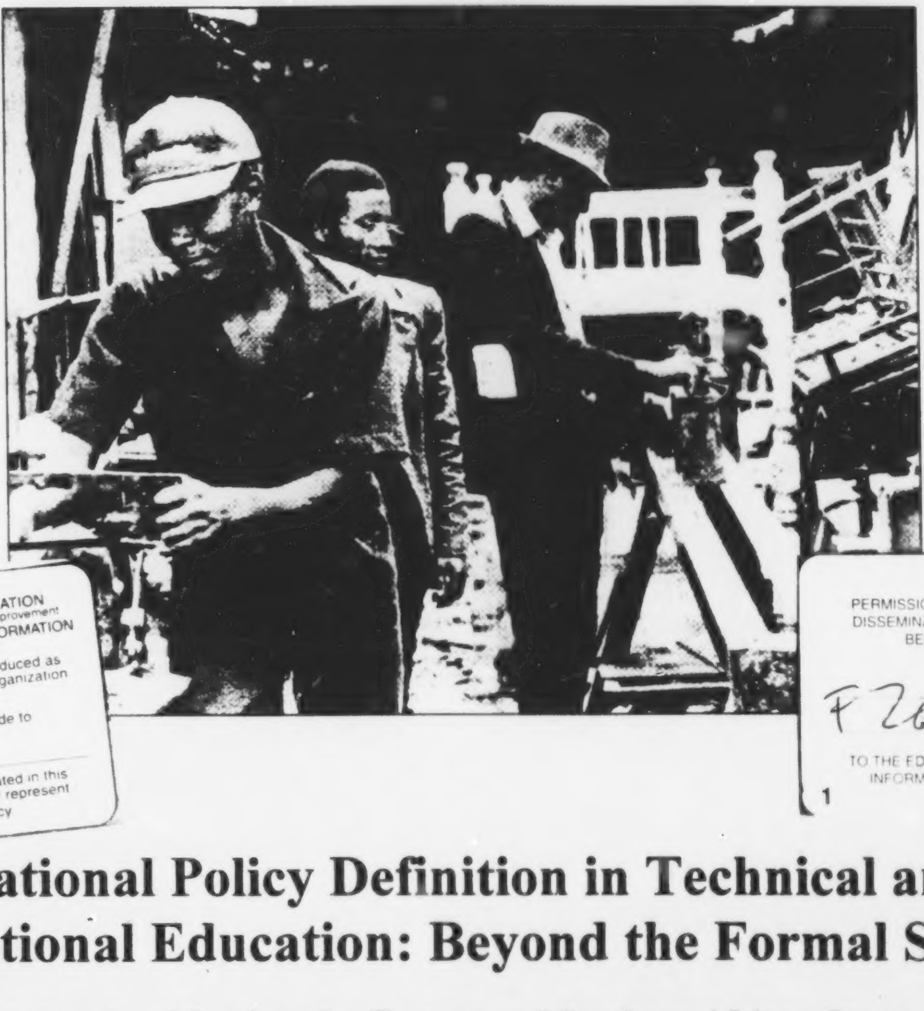
International Project on Technical and Vocational Education
Projet international pour l'enseignement technique et professionnel

Under the Sun or in the Shade?
Jua Kali in African Countries



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National Policy Definition in Technical and Vocational Education: Beyond the Formal Sector

A Subregional Seminar for Eastern and Southern African Countries
Nairobi, Kenya, 15-19 September, 1997

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Jua Kali in Swahili means 'hot sun'. Over the course of years it has come to be used to refer to the informal or non-formal sector of the economy in Kenya.

An excellent reference to the Jua Kali is given in the recently printed book:
King, Kenneth, Jua Kali Kenya: Change & Development in an Informal Economy 1970-95, East African Publishers, Kijabe Street, P.O. Box 45314, Nairobi, Kenya, 1996.

The photograph on the cover of this publication is found on page 95 of that book.

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UNEVOC Berlin

The International Project on Technical and Vocational Education (UNEVOC) is a project of the United Nations Educational, Scientific and Cultural Organisation (UNESCO). Its purpose is to contribute to the development and improvement of technical and vocational education in Member States.

Based on an agreement between UNESCO and the Government of the Federal Republic of Germany on UNEVOC, a project implementation unit has been established in Berlin. UNEVOC Berlin was officially opened on the occasion of the first session of the UNEVOC International Advisory Committee in September 1993.

UNEVOC Berlin assists the overall planning of UNEVOC and is responsible for the implementation of certain activities specified in the UNEVOC programme.

The Seminar in Nairobi was presented by UNEVOC Berlin.

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This report has been prepared and processed by UNEVOC Berlin, with the editorial assistance of Mr Jim Sullivan.

The designations employed in this study do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or concerning its frontiers or boundaries.

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UNEVOC
International Project on Technical and Vocational Education
Projet international pour l'enseignement technique et professionnel

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Foreword

This is a comprehensive report on a Subregional Seminar for Eastern and Southern African Countries titled **National Policy Definition in Technical and Vocational Education: Beyond the Formal Sector**. It was organised and conducted by the UNEVOC Implementation Unit in Berlin of the UNESCO International Project on Technical and Vocational Education. The host country was Kenya.

Without doubt, one of the greatest concerns of the world today is that of providing sufficient support to all people for them to enjoy a reasonably happy life. Of course, there are many factors that will determine this outcome. However, among these is the opportunity for meaningful employment that will provide at least the basic necessities for freedom from the fear of hunger and of economic oppression. However, it is evident that the world, in both developing countries and those that are developed, is not succeeding in alleviating this tragic problem of unemployment, and the suffering that results as a consequence of it.

As is well-known, UNESCO is committed by its basic mission to be concerned for the welfare of people in whatever sphere they are situated. In particular, it addresses this concern through the means of science, education and culture. It fully appreciates the central role of education as a means of constructive human development and of attaining the human welfare to which it is committed. However, it is also conscious of the fact that the problems mentioned above need individual human initiative and freedom as well as support from appropriate organisations. Thus, it has included in its mandate a commitment to supporting effective education for the world of work. This commitment has been made tangible over the past five years through support for the UNEVOC Project.

An important sphere of such education and training is that which is needed by individuals who are self-employed or employed in small-scale businesses. This is often referred to as the non-formal sector, or the informal sector. The majority of people around the world work in this sector. Yet the provision that has been made to assist them in their endeavours has been very little and, in many cases, just non-existent. Therefore UNESCO, through its UNEVOC Project, has made a commitment to reach out to these people that are beyond the formal sector of education and employment and seeks to encourage appropriate authorities, including governments, formal enterprises and non-governmental organisations, to assist the development of an effective non-formal sector within national economies.

The Seminar, of which this is a report, addressed the multifarious issues associated with this endeavour and has both identified the many problems and suggested some solutions. It is to be hoped that the report will alert the appropriate authorities around the world to the urgent need to make tangible commitments to develop and strengthen the non-formal sector including small-business enterprise.

It is my pleasure to recommend the report to you and to urge you to consider its contents in such a way as will encourage your own motivations to develop this economic and social sector to the extent that is within your own powers. Without doubt, one important initiative that needs to result from these endeavours is for all nations to develop **National Policy Definitions in Technical and Vocational Education that is Beyond the Formal Sector**.

Colin N. Power

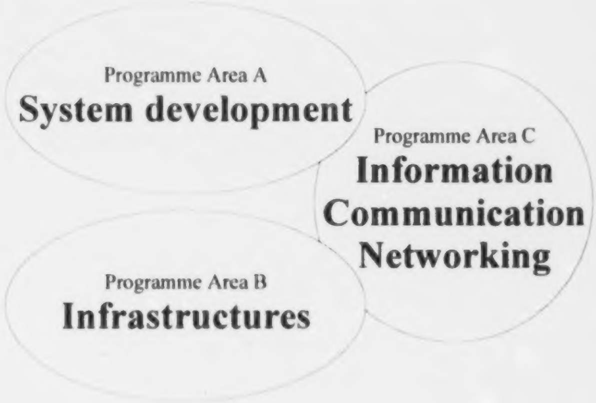
Colin N. Power
Assistant Director-General for Education
UNESCO

1 Introduction: What is UNEVOC?

UNEVOC is the International Project on Technical and Vocational Education of the United Nations Educational, Scientific and Cultural Organisation (UNESCO). It was launched in 1992, following a resolution of UNESCO's General Conference in 1991. It has established a world wide network of entities that are committed to co-operating to achieve its overall goal. This goal is ***to strengthen the development and improvement of technical and vocational education in UNESCO Member States***. In 1992, the German Government made a commitment to UNESCO for on-going, substantial support. Other countries, such as the Republic of Korea, Japan, France, are also providing significant contributions in various forms.

What are the objectives of UNEVOC?

The objectives are clustered into three programme areas that focus on technical and vocational education and its relationship to the world of work. These areas are:



Programme Areas of UNEVOC

Programme Area A:

This area fosters the international exchange of ideas and experiences and promotes studies on policy issues. It is devoted to the development of technical and vocational education systems.

Programme Area B:

This area strengthens national research and development capabilities in order to improve the infrastructures of technical and vocational education.

Programme Area C:

This area increases access to data bases and documentation and strengthens the UNEVOC Network. It addresses information, communication and networking.

What constitutes the UNEVOC Network?

The UNEVOC network includes teaching, training, planning, research and development institutions, and entities within government ministries, that are active in technical and vocational education. It is a Network that constitutes a world wide perspective of this area of education. UNESCO Headquarters in Paris serves this network through interaction on the political level with governments, UN specialised agencies, and other international organisations. The Implementation Unit in Berlin contributes significantly to the design and implementation of the Project. It is pivotal to the networking of UNEVOC Centres. Many UNEVOC activities are also executed by UNESCO's four Regional Offices: in Africa, the Arab States, Asia and the Pacific, and Latin America and the Caribbean, assisted by over 50 UNESCO Offices. National Commissions for UNESCO are also involved in selected UNEVOC activities. An International Advisory Committee advises the Director-General of UNESCO on the design and implementation of the Project.

What are UNEVOC Centres?

Member States, through their National Commissions for UNESCO, have nominated relevant national institutions to become UNEVOC Centres and Associate Centres. At the end of 1997, some 150 Centres and Associate Centres in 104 Member States had been nominated. These Centres are expected to give leadership and thrust to the education and development that results in effective performance within occupational roles. The responsibilities of the UNEVOC Centres include:

- developing and leading a national network;
- ensuring information flow to and from UNESCO and other UNEVOC Centres;
- ensuring that expertise is shared among UNEVOC Network members;
- providing research as requested by the UNESCO Secretariat;
- contributing to UNESCO publications and data bases;
- updating the data of the UNEVOC Directory with information on all UNEVOC Centres and other relevant institutions.

What are the strategies of UNEVOC?

The following are the important strategies that are applied within the UNEVOC Project as a means of attaining the objectives:

Advocacy, policy and monitoring

UNEVOC advocates, supports the development of appropriate policy, and monitors, through various means, a number of fundamental principles relating to technical and vocational education that are embraced by UNESCO. These include: the correlation of effective and efficient technical and vocational education with human development; the primary support for the least developed countries; the access for women to technical and vocational education; the increasing of co-operation between technical and vocational education institutions and the world of work; the improved status of technical and vocational education.

Information source and communication

UNEVOC initiates and encourages the identification, collection, description and dissemination of information and knowledge concerning innovation, ideas and experience in technical and vocational education. This is achieved through studies and publications, through workshops and expert meetings, and through the international exchange of specialists in technical and vocational education.

The quarterly newsletter "UNEVOC INFO", available in both English and French, is compiled and distributed. The UNEVOC Directory presents comprehensive information about UNEVOC Centres and Associate Centres, and other relevant bodies. An up-to-date Inventory of UNEVOC activities around the world is available. A series of UNEVOC Studies is also published.

In order to present information in as clear and user-friendly way as possible, UNEVOC employs the most contemporary means of communication available to it and to its partners. One such means is the Internet. Increasingly, information about UNEVOC, its activities and its publications, is available on the World-WideWeb.

Professional development and exchange

As a means of harvesting the ideas, experiences and recommendations of significant professionals world wide within the field of technical and vocational education and of human resource development within enterprises, seminars, symposiums and workshops are organised and conducted. This is frequently done in co-operation with other important players in the field.

Examples:
- Co-operation between Educational Institutions and Enterprises in Technical and Vocational Education: A Seminar for Key Personnel from Africa and Asia
- The Promotion of Equal Access of Girls and Women to Technical and Vocational Education: An International Expert Meeting

Consultancy and advisory services

UNEVOC assists Governments and institutions in the development of technical and vocational education, as requested. This endeavour extends beyond the UNEVOC Network. International experts are included in this activity. Thus, a comprehensive, international perspective of technical and vocational education and the world of work is brought into focus.

Example:
Advise on projects that would assist the development of technical and vocational education in Azerbaijan

Co-operation

The need for co-operation and mutual support among entities responsible for technical and vocational education, both nationally and internationally, is increasingly obvious. UNEVOC encourages and supports this co-operation in a number of ways. One important way is through the process of twinning. This is an arrangement whereby a UNEVOC Centre forms a joint association with another Centre, with a work enterprise, with a research institution, or possibly with some other training or educational institution, in order to cooperate in professional endeavours and to gain increased benefit therefrom.

UNEVOC Partners

International and intergovernmental organisations, such as the International Labour Organisation, national governmental and non-governmental organisations, and specialised institutions in Member States, cooperate with UNEVOC. The expertise available in these institutions enhances the capacity of UNEVOC to make a significant impact on the development of technical and vocational education around the world.

UNESCO Headquarters, Paris

The UNEVOC Project is implemented under UNESCO's Education Sector in Paris. The Assistant Director-General for Education has the overall responsibility for the planning and management of the Project, with the support of the Section for Technical and Vocational Education.

In accordance with UNESCO's decentralisation policy, responsibility for the management of the Project is shared among UNESCO Paris, UNEVOC Berlin and UNESCO's Regional Offices.

UNEVOC Berlin

UNEVOC Berlin is the "logistic centre" for supporting, serving and networking UNEVOC Centres. It cooperates with other entities within the Network in the design, planning, implementation and evaluation of the strategies and activities for attaining the objectives of the Project.

2 Opening and Closing Ceremonies and Speeches

The Opening Ceremony was chaired by Mr C. J. Chacha-Ogwe, Secretary General, Kenya National Commission for UNESCO, within the Ministry of Education of Kenya. The speeches were presented to the media. Experts were reported by the press and a recorded interview by the media of Dr R. Barry Hobart addressing the objectives and role of UNEVOC within UNESCO, and of this particular Seminar, was aired on national radio.

2.1 Introductory statement by Professor R. Barry HOBART, UNESCO/UNEVOC Consultant

"Kenya shows the way, through one significant means, of dealing in part with the world's nagging unemployment problem"

During this week, Kenya, through the co-operation of the Kenya National Commission for UNESCO and the UNESCO Nairobi Office, will host a most important Seminar addressing the issues of training and employment in the non-formal sector, termed Jua Kali in Kenya. Unemployment is one of the most pressing problems facing the world today, whether we consider sophisticated European countries like Germany or France, or developing countries in Latin America, in South East Asia, in the African continent, or in countries in transition like Hungary and Poland. Even a country like Sweden, that has traditionally been free from this problem, is now facing serious levels of unemployment. Every government around the world has to grapple with this issue!

There are many and varied causes for this phenomenon and the solutions to it are by no means easy. But one most significant contribution to its solution is the support, to the greatest extent possible, of the individual initiatives of people to create their own employment, and, as a consequence, sufficient wealth to meet at least their most basic needs. The Jua Kali programme of Kenya, that has been encouraged and supported for some years by President Moi, is a real and practical example of releasing the entrepreneurial initiatives of the very ordinary person, by which 75% of the world can be classified, to create effective small-business enterprises.

UNESCO, that has always been concerned for the needs of the underprivileged through its programmes in basic education, literacy, and the like, has now extended this concern, in the past four years, by creating a project that is called UNEVOC. This project addresses all the many and varied issues relating to education and training for the world of work, and to maintaining the efficient performance of people within that work. This embraces people employed in government enterprises, in large scale enterprises, small-business enterprises, or in the non-formal sector.

This UNESCO/UNEVOC Programme has been supported by a number of different countries, such as France, Japan, the Republic of Korea; but most especially by Germany that has matched financially the contribution of UNESCO to the UNEVOC Project since its inception.

In fulfilment of the special concern that UNESCO has for the African continent, this Seminar is being conducted in Nairobi this week and is titled: ***National Policy Definition in Technical and Vocational Education: Beyond the Formal Sector***. The Seminar will lead twenty participants from twelve African countries as they address the multitude of issues related to the effective support for the development of small-business enterprise and of the entrepreneurial attitudes and skills needed for the non-formal sector to make its invaluable contribution to the alleviation of unemployment around the world. This support must come from governments, from the many other financial entities within the economy, from society as a whole and its attitudes, and from the social partners, which includes the important role of unions. The discussion and debates that will characterise this Seminar will be as relevant to the developed world as to the developing world and to the countries in transition. UNESCO feels privileged to make this small contribution to what is a pre-eminent problem within our societies today.

2.2 Opening speech by Professor Shem WANDIGA, representative of Kenya on the UNESCO Executive Board

Secretary General, Mr Chacha-Ogwe, of the Kenya National Commission for UNESCO, Professor Barry Hobart, Seminar Organisers, Distinguished Participants, Ladies and Gentlemen.

I feel highly honoured to be with you here as the Guest of Honour during the official opening of this important Seminar. I also wish to welcome you to Kenya. I hope that you enjoy our tourist attractions as well as participating in this Seminar.

In presenting this speech, I must firstly say that I feel at home. One aspect I enjoy most on these types of occasions is the meeting of many people from varied backgrounds. This enhances the prospects of peace worldwide.

In Kenya, since 1963, we have struggled to create employment by creating industries, businesses, and our own institutions. This experience has taught us that we still lack something; and that is training. We have about 40,000 university students of which about 8,000 come out each year to find employment. Other sectors of education also produce some 8,000 people each year to add to the employment field. But the jobs are not sufficient to cope with these numbers. With this experience, the Kenya community needs to make a thorough assessment to determine where failure may have occurred. Thus, it is appropriate that this Seminar is organised by UNEVOC, the arm of UNESCO that is concerned with education and training for the world of work.

UNEVOC is the International Project on Technical and Vocational Education of UNESCO. This Project was launched in 1992 resulting from a resolution of UNESCO's General Conference in 1991. UNEVOC has established a worldwide network to achieve the overall goal of strengthening the development and improvement of technical and vocational education in UNESCO Member States. The activities of UNEVOC focus on programmes related to system development, infrastructures and information communication networking.

Mr Chairman, the organisation of this Seminar is indeed an implementation of a section of the UNEVOC Workplan for 1996-1997 which states that "In order to assist the efforts of African Member States to develop broad-based national policies in technical and vocational education, a subregional Seminar will be held in technical and vocational education. Based on this Seminar, and subsequent to it, national follow-up activities will be initiated."

Mr Chairman, this Seminar is being held at an opportune time: a time when our countries are faced with economic hardships caused by high population growth rates and urbanisation that have put considerable pressure on education, training, health and employment. The region's economic problems have been compounded by the adverse effects of world economic recession, drought, refugee problems, externally influenced structural adjustment programmes and external debt problems.

These problems have posed a major challenge for the countries within the region in their quest for the provision of quality education and training. It is therefore imperative that the current technical education and training policies are reviewed to ensure that they address the contemporary socio-economic challenges appropriately. For example, the adoption of externally influenced structural adjustment programmes have ushered in economic liberalisation, privatisation of certain parastatals, retrenchment of staff within public and private sectors of the economy, reduction of Government grants to public institutions, the introduction of cost sharing and other cost recovery measures, and the encouraging of more autonomy while emphasising transparency and accountability.

The second issue that must be taken into account when formulating a technical training policy is the growing unemployment among technically skilled people due to slow growth within the formal sectors of our economies. This creates a need for a sustained focus towards rapid industrialisation and the strengthening of the small-scale industries and the informal sector to provide additional employment. Emphasis on self-employment is a must! Bringing our training programmes into line with self-employment is therefore essential.

Professor Hobart, as co-ordinator of this Seminar, you and your participants have a very challenging and important task ahead of you within the next five days. In order to accomplish this task satisfactorily it will indeed be necessary to at least develop an agreed-upon vision. The ideal, or desired end-product, is to develop a national training policy, to carry out a survey based on demographic economic factors that influence decisions on education and training, to review the current policies, to discuss labour market issues, to benefit from the report of a subregional workshop on "The Financing and Management of Vocational Education and Training in Eastern and Southern Africa" and, finally, to carry out a comparative analysis of the policies of the countries attending the Seminar.

I hope that you come up with recommendations that will go a long way towards bringing out appropriate policies for the region.

It is now my pleasure to declare the Seminar officially open. Thank you.

2.3 Closing speech by Mr S. M. KYUNGU, Director of Education, Ministry of Education, Kenya

Mr. Chairman, Professor Hobart, Distinguished Participants,

It gives me great pleasure to be invited to conclude this UNESCO/UNEVOC Seminar today with some parting observations.

First, let me say that not only is it evident, from the title of this Seminar, that you have been addressing issues of education and training related to the world of work that are of considerable importance, but also, I am informed, that you have addressed these issues in significant depth and from a wide variety of perspectives.

As we all appreciate, education and training is ultimately designed to expand the human person and enable that person to move towards a maximum development of individual potential. By so doing, the person, in whatever context, should increasingly enjoy the pleasure of living and of meeting the challenges that confront each one of us, in one form or another, every day of our lives. Perhaps the most significant of these challenges is finding a satisfying role in the world of work, and progressing in it. Sadly, we have to admit, that for many in this world they are unsuccessful in that challenge.

The problems of unemployment, underemployment, unsatisfying employment, that are compounded by excessive levels of population growth and grossly uneven distribution of the world's wealth, compels us to look long and hard at the world of work and the strategies that we can devise, develop, implement, and evaluate to make that world meet human needs in a far more effective way than it does in most areas of the world today. Even in much of the developed world this statement is true. And it is patently true in the developing world!

Thus, your analysis in this Seminar of the informal sector in Kenya, which we call the Jua Kali, or what is elsewhere called the non-formal sector, even the small-business sector, is of primary importance to the world's need for increasing wealth and a better distribution of it. The needs to devise more effective means of training for this sector, of lifting its status and acceptability as an area of employment, of encouraging it as an effective and satisfying potential for entrepreneurship, of integrating it more fully into the total economy, of giving it the financial support from various sources it needs to develop, of lifting the standards of its output to enable it to succeed in the global economy with its rigorous competition, and many other such issues that you have addressed in this Seminar: all these urgently need effective and efficient solutions.

I look forward, therefore, to receiving a copy of the publication that will be produced by UNEVOC Berlin which will record the deliberations and recommendations that you have made during this week as an important attempt to influence decision-making entities around the world in terms of significantly improving the non-formal sector and small-business enterprise for meeting the production and employment needs that confront us today.

It is encouraging to know that UNESCO has extended its efforts to achieve its goals of improving human welfare through education, science and culture, by addressing the issues of education for the world of work through the UNEVOC Project. I would encourage you participants to return to your own individual countries and make every effort to assist in and support the application of the recommendations you have made through this Seminar. I would also encourage the UNEVOC Project to continue in its efforts to assist UNESCO to achieve its worthy goals, by furthering UNEVOC's own particular endeavours, such as this Seminar held in Nairobi this week.

I wish you a safe return to your individual countries, and hope that we can welcome you once again in the near future to Kenya. Thank you.

3 Discussion and Debate

The following is a record of the discussion and debate that occurred among the participants of the Seminar. This interaction for each day was typed out during the evening and tabled the next morning. This was amended by the participants, corrected, and tabled again in the corrected form. It was then endorsed by the participants. The report of the discussion and debate below is a consolidation of the interaction that occurred during the Seminar. It has been written by the co-ordinator of the Seminar, Prof. R. Barry Hobart.

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3.1 Parameters of the discussion and debate

Some ***themes*** emerged throughout the Seminar that became, in effect, the parameters of the discussion and debate. These were:

- That the non-formal sector, or informal sector, differs significantly from country to country and even within a country. The differences tend to stem from: the **context** of the non-formal sector, the **support** given it by governments and other relevant entities, the **attitudes** of the society towards it, the **market** that it addresses, the level of **competencies** of those engaged in it, the **recognition** it is given within the total economy, and the degree to which it is **encouraged** within the society as a whole.
- That, as a result of the above, it is well-nigh impossible to agree on a **definition** of the non-formal sector, and a **delineation** of it from the formal sector that would apply universally. For example, there was considerable debate as to whether 'hawkers' should be included within the sector or not. It became obvious that an answer to this question depended upon the traditions of a particular society, the attitudes of people to the sector, and, quite importantly, the concepts and philosophy held as to what constitutes genuine economic activity and, therefore, what actually does contribute to the economic development of a nation.
- That the measure of **autonomy and independence** that the non-formal sector should have is difficult to determine. Vigorous debate centred around the proposition that the non-formal sector should be formalised. Again, there was uncertainty with respect to the degree to which there should be intervention within the sector without that intervention becoming an intrusion that inhibits personal initiative and personal freedom.
- That, while there was general agreement that **legal support** should be given to the non-formal sector, and that such support should be thorough, it was also recognised, flowing from the above, that it is difficult to define the exact nature that such legal support should take.

3.2 Points of agreement that were highlighted

The following points of agreement reoccurred time and again during the discussion and debates.

- **Population growth** is of primary importance to the economic, employment and social development of the non-formal sector. In some countries there has been a tendency for population growth to outstrip the employment possibilities within the total economy, let alone within the non-formal sector. This impacts seriously upon the non-formal sector, upon the potential for increasing training within it, on its employment potential, upon the infrastructure needed to support its development and its increasing efficiency, and on the logistics of control. Thus, it was affirmed that **the control of population growth** is of primary importance to the development of an effective non-formal sector within the economy.
- There needs to be a greater **articulation among the various economic sectors** within a nation. Thus, the non-formal sector must be included in the total economy in such a way as to allow for transition from that sector to small business, to employment within the formal sector, to the extending of competencies for progress within, or change of, employment, etc. To achieve this aim it was recognised that greater emphasis must be given to **training** for the sector, to **standards** both of product and employment, and to lifting the **status** of the non-formal sector.
- Considerable importance was given to the need for **training** for the sector and within the sector. The provision of that training needs to be characterised by **flexibility**, **relevance**, **dynamic curricula** that reflect, as immediately as possible, the **changes** in technology, and the diversification of competencies needed for sustained employment and employability within the economy. In this context, emphasis was given to the need for competencies (knowledge, skills and attitudes) that go beyond tools and equipment to the preparation of people for **the real world of work**. In the non-formal sector

especially, these competencies would include support for **self-employment, entrepreneurship** and **individual initiative**. Further, these competencies need to be **contextually relevant**, and enable and encourage **lifelong learning** and development.

- The need for **planning** that develops co-ordinated and well-thought-out plans for the various sectors of the economy, especially the non-formal sector, and that are applied rigorously and consistently, was thoroughly endorsed. It was perceived that such planning would facilitate the articulation among the sectors mentioned above, would address the whole issue of training and the personnel needed, and the essential competencies required by such personnel to deliver the training that will effect the standards of production and output necessary for the informal sector to be integrated into the economy. This planning would also address the **legal framework** necessary for the efficient functioning and development of the non-formal sector, the **financial support** of it that is essential, the provision of the **infrastructure required** for its development and diversification, and an appropriate balance between the **intervention** that is necessary for its controlled development within the context of the total economy, and the preservation of the **freedom** necessary for personal enterprise and entrepreneurship to flourish.
- The non-formal sector (especially if small-business enterprise is included in that term) is of enormous importance to employment and to the production necessary for the satisfaction of basic human needs in every part of the global economy. However, it will not develop and flourish unless its **status within the economy and the society** as a whole is lifted. It was recognised that the whole issue of the status needed for education and training for the world of work to be chosen by potential learners, and to be appropriately rewarded, is complex. Yet it was acknowledged to be of primary importance to the addressing **of employment and employability**, of the levels of **production** necessary to satisfy human needs, of the lifting of **productivity** within the context of the **global economy,** and, thus, for it to be **competitive** within the economy as a whole.
- Closely related to the above issue was the recognition that **attitudes affect the economy**, especially the non-formal sector, across a wide spectrum of dimensions that are relevant to an efficient world of work. As a consequence, the formation of appropriate and supporting attitudes must be an essential part of any education and training that relates to the world of work. Such attitudes affect the attaining of the **essential standards** needed within the non-formal sector, the desire for **the creative independence** needed for the choosing by appropriate people to engage within that sector, for people to enjoy a sense of **satisfaction** from their activity within the sector, for employment mobility across sectors to be maintained, and for financial support to be given to the initiatives of people wanting to participate in the sector.
- It was generally agreed, in the light of the papers presented, that the **issue of gender** and the support that needs to be given to girls and women in terms of the non-formal sector were, generally around the world, not adequately addressed. There were some exceptions to this observation. However, all agreed that this area of universal human concern today should also be in the forefront of support given for the development of the non-formal sector.
- As could be expected from a group of highly-experienced people who were seeking to analyse carefully the needs of the non-formal sector, it became increasingly obvious as the discussion and debates went on that there were more **areas of uncertainty** than of certainty among the group. This led to a repeated affirmation by the participants of the need for **thorough research and studies** to be undertaken in the various settings that allow for contextual relevance and reliable and valid data on which the multitude of decisions to be made over the next decade can be based. This strong consensus among the participants forms the most pressing recommendation that came from the Seminar. This is recorded in the next section that enumerates the recommendations from the Seminar.

3.3 Discussion and debate addressing specific issues

During the three days of discussion and debates, certain more global and common issues were constantly addressed. The following is a record of the concepts and ideas expressed.

(a) The economy

Technical and vocational education is frequently relegated to a secondary position by politicians because an insufficient number of them understand how vitally important this area of education is and its primary contribution to economic development. This is even more true of the politicians' understanding of and attitudes to the non-formal sector. It was also asserted that, frequently, formal education, and especially the higher education sector, has a stronger lobby within the political world than does the non-formal sector and small-business enterprise. Thus, politicians must be helped to develop an increased understanding of this sector and its needs in order that it commands the attention and power over resources that are appropriate for its healthy development.

It was felt that a paradox existed between the necessity for the liberation of the market economy in order to establish standards, high productivity and effective competition on the one hand, but, on the other hand, the need to maintain sufficient protection to maintain a viable market for the output from the non-formal and small-business sector.

The control of land and space was also seen as an important economic problem with respect to the sector. The congestion that is occurring in cities causes considerable difficulties and frequently causes land for use by the non-formal sector to become impossibly scarce and expensive. This again related to the infrastructure that is essential to support the healthy development of the non-formal sector.

(b) Employment

It seems that increasingly market forces are allowed to determine vital areas of decision-making without being modified by other social considerations. For the informal sector to be able to succeed in this arena, self-employment competencies need to be developed. These competencies include the wide range of knowledge, skills and attitudes needed to become an effective and efficient entrepreneur. However, it was felt that these competencies are difficult to develop, and that the many failures in the non-formal sector tend to indicate this. This led to an expression of the need to improve considerably the curricula and teaching related to the development of entrepreneurial skills.

When discussing "employment" and "unemployment" it was recognised that these terms have tended to change over the past years. Thus, to address the issues that relate to them fruitfully, there is an urgent need to define the terms.

Various areas of the economy were seen to be significantly important with respect to employment. The problems relating to the immigrant population, to the mobility of the worker, to the globalisation of the world of work and its impact on training, to displaced persons such as refugees, to gender within the work force, and particularly to youth unemployment were all seen to be highly relevant to the non-formal sector and its potential for employment. It was noted that the Sessional Paper Number One of 1986 (Kenya) on "Economic Development for Renewed Growth" recommended the encouragement of self-employment as a partial solution to the unemployment problem. However, in this context, the problems that exist within this sector are manifest crudity in standards: lack of quality, lack of organisational skills, lack of marketing skills and financial know-how. These problems are closely linked to training. In this respect, it was felt that the formal institutions could help the non-formal sector by including entrepreneurial competencies in their own courses, and by assisting people in the non-formal sector and small-business enterprise to undertake entrepreneurial initiatives. But emphasis was placed on the complexity and comprehensiveness of entrepreneurial competencies. Thus, they need to be developed well if the non-formal sector is to succeed.

(c) Finance

It was agreed that there are serious problems relating to finance in the non-formal sector. Small-scale enterprises must be established on a cost-effective basis. If they are not, it is impossible for them to obtain the loans, from the government or other financial institutions, that they need. They must tap into financial donors, and be genuinely income-generating entities.

A serious difficulty with respect to technical and vocational educational and training institutions becoming income-generating entities that could contribute to the financial resources for the sector is that the income generated often goes back to the Ministry and does not become a reward for entrepreneurial efforts. This dampens motivation.

Considerable discussion was held on the training levy as a means of finance. But the money obtained from such a levy is often available to formal education and to creating jobs; not to the informal sector. Access to finance is a very important issue for the non-formal sector. Frequently this is not possible for small business enterprises, and especially the non-formal sector.

It was also noted that many activities in the non-formal sector are donor-funded and, thus, they become difficult to sustain when the donors pull out.

(d) Education and training

The problems with technical and vocational education and training that seem to be common among most of the countries represented in the Seminar are relevance, equity, access, quality and lack of a national training strategy. It was felt that there is a great need for the integration of technical and vocational education and training with secondary and general education.

In terms of teaching/learning strategies, it was strongly asserted that education and training should go to where the people are; and not always expect that the learner must come to where the training institutions are. Again, too often foreign syllabuses are used in the education systems of developing countries. These may not be at all relevant. Nor may they suit the appropriate teaching/learning strategies for a particular community. With respect to the syllabuses, it was felt that there is also a real mismatch between training programmes and industrial experience in most of the countries addressed. Again, it was voiced that students may have toolkits, and gain the necessary knowledge, but still not be successful. Education is not just about knowledge and equipment, but about standards, attitudes and competencies.

The problems of lack of education and training are marginalising a significant portion of the population. We need to evaluate our educational experience: what have we learned from it? People must be able to take in the changes that are in their context of the world of work and apply their learning to these, or adapt their learning to them. Thus, people must learn how to learn so that they can adapt themselves to, and progress in, the light of change.

Some discussion was had about the place of standards. Some felt that if we insist too much on standards then we may marginalise the marginalised – the non-formal workers. Others felt that standards were of primary significance. Most felt that with the reality of globalisation and competition, standards and quality are imperative. Agitating for acceptable standards from both the formal and informal sector should not be construed as marginalising the informal sector producers, but rather as taking them aboard so that they ultimately make it into the competitive global world. Further, it was felt that the possibility of providing protection of industry in a particular country was fast becoming impossible. It was also recognised that there is a close and important relationship between evaluation and certification of learning experiences.

The stakeholders in this area of education and training need to be co-ordinated. Such stakeholders are: private training institutions, public training institutions, industry, various government departments and ministries, and trade unions. This related to the question of how people graduate up the career and employment ladder. Is it possible for them to go from the non-formal sector, to small-business enterprise, and on to larger institutions of employment? This highlighted the reality that many people who are engaged in the non-formal sector have no education at all. Thus the transition, or progress, within the world of work becomes very difficult.

This caused the group to consider also the question of the retraining of graduates and the reality of lifelong learning. It is possible to upgrade the skills of apprentices who have graduated many years ago? What are institutions doing about retrenchment? It seems that there is no education directed towards people who get into the non-formal sector. That is, there is really no, or very little, preparation for the world of work. There is also the problem that courses given to assist the development of competencies for this sector do not lead to formal qualifications.

Another problem is that equipment on which students are trained may be very sophisticated: for example, in medicine. But then the graduate goes back to a village where the facilities are much less sophisticated. Also, many of the best facilities are situated in urban areas and are therefore inaccessible to many rural dwellers.

Whenever training takes place it should allow for adaptability to new situations and be responsive to technological change and to changing social needs. Open-air training was recommended as adjusting to the problems of insufficient equipment and facilities. Distance education was recommended as a way of bringing education to the learner. Competency-based education was seen as a means of establishing relevant open-entry open-exit systems of learning and the development of competencies as they are needed and relevant. There is a need to open up workshops and their equipment, etc. to be used for a fee by the informal sector over weekends for the purposes of training and production. The question of the adaptability of skills needs to be addressed in the light of the differences that exist between the world of work and training institutions.

(e) Curriculum

Serious problems were expressed in terms of curriculum development for technical and vocational education and training. It was felt that curriculum development was not fast enough to keep up with the changes in technology. The computer is a good example. By the time a curriculum has been developed to deal with the competencies needed with present understanding and skills, those competencies have become out-dated. Thus, the curriculum tends always to be dragging behind the contemporary knowledge and practice. This exacerbates the problems of relevance of the skills developed by graduates and limits the demand for their employment Thus, curricula must be flexible and ready to adapt to change. Participatory development of curricula was advocated where all the stakeholders would contribute.

Cultural thinking and appreciation should be included in all technical and vocational training curricula. Further, an appreciation for the environment and the development of attitudes to protect it should characterise all technical and vocational education and training curricula. Again, all education should develop and extend the capacity of learners to become critical thinkers. This is important in technical and vocational education and training as well as in general education.

(f) Teachers/trainers

The corollary of these problems with the curricula is that of teacher/trainer training. If the curriculum is kept up to date, how are the teachers up-dated in their knowledge and skills to teach and demonstrate the new competencies? In the face of change and the dynamics of development, how do we effectively train the trainers? That is, if we are to have good teaching, then the question must be asked as to how to prepare the implementers of training: teachers and industry trainers. This was seen as a vital issue to be addressed.

(g) Jua Kali in Kenya

Jua Kali in Swahili means 'hot sun'. Over the course of years it has come to be used to refer to the informal or non-formal sector of the economy. It is now known in Kenya as the Jua Kali Development Programme.

Kenya is experimenting. There are no clear results and sometimes the experiments are not really relevant and to the point. However, it is trying to find answers to the most pressing problems facing this vital sector. It has faced the difficulties of Kenya in recent years that have included problems of drought, structural adjustment, high debt, and refugee influx that have slowed down economic growth. Kenya is working in a situation in which the economy, the society, technology and many other aspects of human behaviour and thinking are dynamic. Thus, it is confronted daily with change; and we must learn to adjust to it in a positive, creative and constructive way.

The Jua Kali's value and place needs to be deeply embedded into the society if it is to develop, improve and increase its economic potential. Again, it needs to have a very real and effective relationship with other economic entities within the society: both the middle man and the larger scale enterprises. Frequently the status of the informal sector makes it the 'next best' if the person fails to get into the formal sector. This does not encourage the non-formal sector as a real and important entity within the economy and the world of work. The image of the sector is, however, rapidly changing.

Policy seems to be confused and it is hard to develop a substantive policy. However, significant steps have been taken in the **process** of policy development. But our aims must be clear in education and, particularly, in technical and vocational education. In general, it must be focused on improvement in the quality of life. Technical and vocational education and training ought to contribute to (a) world peace, and (b) the two essential freedoms: freedom from fear and freedom from want.

There is the important question of who should represent the informal sector in the decision-making bodies within the society, politics and the economy. This led to a significant emphasis on the need for flexibility. The question was posed as to how inflexibility can be changed. Inflexibility is often related to formal processes, bureaucracies, approving processes, etc. that cause the outcomes of curricula efforts to be irrelevant by the time they receive approval and are implemented. Thus, again, flexibility was emphasised as essential to responding to change.

The political stability of a country is extremely important for the development of a country and its economic prosperity. This also affects training and education.

Two locations of the Jua Kali were visited by the participants. These visits were led by the officials of the locations and explained to the participants. It was observed that the problems of space were critical. Plans to improve training were manifested by new buildings, partly finished, that are designed to provide for training. The general working environment was felt by many participants to be inferior and could be improved. It was obvious that this resulted partly from the critical shortage of space. Safety was a factor that seemed to need careful attention. The need for emphasis on training, standards, and targeting specific markets was reinforced by these visits.

4 Recommendations

A National Strategy is needed to be developed by all countries that defines:

a) a vision for this sector,
b) the aims and objectives,
c) the time frame for implementation,
d) that considers carefully the social and economic factors operating,
e) that looks at the environment, and
f) studies carefully the context in which technical and vocational education and the non-formal sector is operating.

In-depth studies of the non-formal sector and the role of small-business enterprise in economic development should be undertaken. An attempt at such a study has been done in Botswana, as evidenced by PEER consultants report of February 1997.

1. Small entrepreneurs who show the will and whose products and/or services have the potential for improving the lives of those participating in the enterprise world should be assisted by government intervention through financial and logistic support with suitable shelter and basic equipment to enhance the quality of products and services from the non-formal sector and from small-business enterprises.

2. Legal support of the non-formal sector should be given and should be thoroughly implemented.

3. Governments, and other responsible entities in the various nations, should address seriously the problems of school drop-outs and youth unemployment and determine the contribution that the non-formal sector can make to solving these problems.

4. There must be national support of regulatory population growth if the problems of unemployment are to be solved.

5. Every nation should develop a positive action for female participation in technical and vocational education and training.

5 Participants' Presentations

5.1 A Position Paper: "Technical and Vocational Education and Training Policy in Kenya" by Mr Peter O. OKAKA

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(1) Population

Kenya's population during the 1989 census was estimated to be 22.1 million, and subsequent year (1990) estimated population was 22.8 million, a growth of 3.6% per annum. It was noted that, if this trend continued, Kenya will have a population of about 30.1 million by the year 2000.

According to the same census of 1989, the age composition of its population portrayed the following features: 59% of Kenyan are people aged less that 20 years, and, by contrast, the most productive group aged 20 to 59 years constituted only 36% of the population while 18% of the total population (3.8 million) were children under 5 years. Further to this, 20% of the same population, 4.3 million, were women of childbearing age (i.e. 15 to 49 years old). These population trends have continued to remain the same.

To this end, the current population potential will continue to influence the size and expansion of education and training sectors in an effort to cope with increasing demands of education and training from the school-going age.

According to the current projections of population for Kenya (1980-2000), it is estimated that the number of primary school children (6-12 years) by the year 2000 will be between 7 and 9 million. As stated earlier, there will be a high demand for education, training and employment. This is a major challenge to be faced and addressed by our country, even if fertility and mortality decline or remain constant.

(2) Economic situation

The Kenya government during the last three decades has been committed to provide avenues for all her citizens to participate fully in the economic development of their nation, and consequently endeavour to achieve a decent standard of living.

During this period, Kenya has witnessed mixed economic performances which have included varied standards of living of her citizens. The first decade of Kenya's independence saw Gross Domestic Product (GDP) grow by an average of 6.5% annually. This growth was indeed far above the population growth rate and ensured that the citizens enjoyed growing per-capita incomes.

This was made possible through expanded agricultural cultivation of high value crops which indigenous Kenyans were denied opportunity to grow during the colonial era.

During the second decade of Kenya's Independence, the then good economic performance declined due to a number of factors. The major factors included adverse effects of world economic recession, the first oil crisis of 1973, increased population growth rate, drought, refugee influx from other neighbouring countries, and external debt problems.

However, since 1986 to 1993, the Government addressed itself to the strategies of reversing the trend by formulating and implementing Structural Adjustment Programmes (SAPs) contained in the Sessional Paper No. 1, 1986, on Economic Management for Renewed Growth.

This problem of economic stagnation was tackled through three major policy fronts, namely: the integral role of the private sector in the economy and the impact of high budget deficits of restrictive foreign trade policies. New trends and concepts such as cost-sharing, retrenchment, sale of parastatals, price decontrols, removal of import licensing, foreign exchange deregulation and removal of Government subsidies have featured very much in our current economic management practices. Although these policies have over-stretched the people, the government has stabilised the economy and revived growth: GDP grew by 3% in 1994, 5% in 1995 and an estimated 6% in 1996.

In spite of these economic hardships, the government has continued to give high priority to education and training which takes over 38% of the Government's Annual Recurrent Budget.

(3) Human resource development

The Government has always considered the human resource as the most critical input in the mobilisation for national development needs.

In summary, to date there are 5.5 million pupils in primary schools, 620,000 pupils in secondary schools, 64,200 students in vocational and technical training institutes, 20,000 in teachers colleges and 40,000 in national universities. In 1995, of 400,000 pupils who did the Kenya Certificate of Primary Education, only 45% proceeded to secondary schools, and of 140,000 who did the Kenya Certificate of Education, only 6.6% will join the national universities. There is, therefore, an urgent need to train and absorb the large numbers of both primary and secondary school-leavers in productive economic activities.

In order to establish the changing skill demands in the country, the Kenya Government carried out a manpower survey, between 1986-88, which revealed that an overall demand of occupational employment in the modern sector is expected to grow by 40% per year (Carpentry and Joinery, Textiles and Food Processing – 10%, Electrical Trades – 7%, Mechanical Engineering – 8% and Business Courses – 4%). The projected growth is consistent with the prediction of Sessional Paper No. 1 of 1986 on "Economic Management for Renewed Growth".

Since the informal sector is expected to play a major role in economic activities, it follows that a good proportion of the products of technical training institutes will be absorbed by the sector. The actual absorptive capacity of the sector has not been determined but it is estimated that the sector will create about 100,000 jobs per year. What is critical is to develop training programmes which are market-driven in order to achieve this target.

However, the liberal arts related courses will continue to be dormant at under graduate level. The plan is to annually increase the science-based courses so as to achieve a ratio of 50:50 for science to arts disciplines. Increased participation of women will be realised by lowering female entry points by one point.

There is still some degree of uncertainty in the demand for skills in the economy. To start with, there is a need to carry out a new manpower survey since the one carried out in 1986 is now outdated. Even when a new manpower survey is carried out the accuracy of projections will depend on, amongst other things, demographic trends and policy changes which open economies to international trade and technological change; factors which in themselves are very difficult to predetermine.

(4) Labour market issues

Labour Market Analysis

The Kenya Government recognises the importance of Labour Market Analysis and monitoring as a basis for employment policy and programme formulation. A sound labour market analysis and monitoring system is necessary for capturing early signals of disturbances in the labour market; assessing the changing employment and unemployment situation; formulation of well-targeted policies and programmes; and for monitoring the impact of specific policies and programme incentives.

The current Development Plan, 1994-1996, and the Sessional Paper No. 1 of 1994 on Recovery and Sustainable Development to the Year 2010 underscore the importance of a sound information-base on employment trends and labour market development. The Sessional Paper further states that the Government will:

Pursue active labour market policies, monitor the labour market situations and trends, undertake occupational research to provide accurate and reliable labour market information, provide vocational guidance and counselling services to individuals and groups and also develop and strengthen employment promotion services provided in the District Employment Bureaux, collect reliable information on employment in different socio-economic sectors, household incomes and standards of living.

Labour Market Situation

Kenya, like other developing countries, is faced with a complex employment problem. First is the problem of open unemployment characterised by people without work and are either seen idling around or actively looking for work. This problem is mostly prevalent in the urban areas and the majority of the openly unemployed are young and relatively more educated.

Second is the problem of under-employment and low productivity which is most prevalent in the rural agriculture and the urban informal sector. Under-employment and low productivity are characterised by people who work for long hours yet the income from their work is not enough to meet their basic needs and/or people who would be better deployed doing something else. Third is the youth employment problem which is widespread in both the urban and rural areas. The youth employment problem is characterised by a mismatch between demand and supply in the labour market. Whereas the majority of the youth lack technical and vocational skills, many of the jobs in the labour market require such skills.

It is estimated that about 25% of the labour force are currently openly unemployed. It is further projected that the labour force will increase from 11.5 million in 1996 to 14.6 million in the year 2000. The task of providing enough jobs for the 492,000 persons who will be entering the labour force every year between 1996 and the year 2000 is not an easy one. In order to provide full employment for this rapidly growing labour force, it is projected that employment must grow at a rate of 4.3% annually between 1996 and the year 2010, or 492,000 jobs annually totalling to 6.4 million jobs over the period 1996-2010.

About 59.9% of all new jobs between 1996 and the year 2010 are expected to be created in the traditional agriculture and the rural non-farm sector, and traditional agriculture alone is expected to create about 46% of all new jobs over the period. The second largest share of new jobs is expected to be created in the urban informal sector accounting for 23.5%, followed by the modern sector which is expected to create 17.4% of all new jobs between 1996 and the year 2010.

Labour Market Policies

A number of policy approaches have been pursued since Independence in 1963 with regard to employment. The employment policy pursued during the first decade of Independence was basically concerned with Kenyanisation of jobs previously occupied by foreigners and the expansion of education and training to provide required skills for Kenyans.

Other measures that have been pursued to address the unemployment problem include the three Tripartite Agreements implemented in 1964, 1970 and 1979; promotion of informal sector employment; rural works programmes.

The current Government employment policy aims at not only providing jobs to all Kenyans who are able and willing to work, but also to ensure that the employment provided is productive. The elements of the policy include:

- Improving productivity in all sectors of the economy.
- Providing an enabling environment from private sector led economic growth.
- Promotion of human resources development in line with the changing needs of the economy.
- Accelerating of agricultural sector growth.
- Increase in smallholders productivity, and
- Expansion of rural employment.
- Integration of women and mainstream economic activities.
- Development of appropriate programmes tailored to alleviate the unemployment problem among the youth through special youth development programmes.

To this end the MRTT&T has a heavy responsibility to formulate programmes which will meet the aspirations of this nation.

(5) Technical and vocational education and training system

Historical overview of TVET

Technical training as an art and science began in Kenya a very long time ago. Long before the arrival of the Europeans, Kenyans knew how to build their houses, fashion agricultural implements, and make spears, knives, hoes, axes, cooking utensils and water containers, etc. The ancient art and technical skills made the life of our people relatively more comfortable to a degree allowed by their own national environment and skill competencies. Traditionally, these skills were passed from father to son within the family or clan in form of an apprenticeship system.

The coming of the Europeans and the decision to build the Uganda railway which attracted the Indian traders and labourers were instrumental in the training of artisans and craftsmen at Kabete Native Industrial Training Deport starting from 1924. The Christian Missionaries brought in technicians and made an effort to train Kenyans in the different skills to assist in the maintenance of the services and the operations. Such places as Mumias, Kikuyu and Machakos were early sites for technical training.

Growth and Development

The second world war brought a greater influx of people, more sophisticated equipment and machinery, and a greater need for training. Army corps were established, and recruitment on a very large scale began among the Kenyans. The need was for drivers, mechanics, builders, electricians, welders, carpenters, clerks, etc. More so-called fundis brought their skills after the war and set themselves up in the locations as craftsmen and were very useful. In the late forties and early fifties, there were more young Kenyans qualifying from primary schools. The industrial depots were upgraded to vocational schools and in the early sixties were again converted to secondary vocational schools.

Another major breakthrough for technical and vocational training in Kenya was the setting up in 1954 of a Commission for Higher Education whose main recommendation was the establishment of the Royal Technical College, Nairobi. This institution later became Nairobi University College and thereafter University of Nairobi. The Mombasa Institute of

Moslem Education was already in existence having been established in 1948 to provide technical and vocational education to Moslem students of East Africa. In 1966, it was converted into Mombasa Technical Institute and became Mombasa Polytechnic in 1972. In 1961, the Kenya Polytechnic was established to provide basic craft courses which were phased out beginning in 1966 following the introduction of similar courses in vocational schools and technical high schools.

Since independence, there has been tremendous growth and development of technical and vocational education and training as a result of direct government involvement and community participation. In the late 1960s and 1970s, the government developed industrial education in 35 secondary schools. At the same time, 18 technical secondary schools were established to offer technical education at secondary level. These were converted into technical training institutes in 1986 and started offering artisan courses. In 1987, there were 4 national polytechnics, 17 institutes of technology, 4 vocational training programmes for school-leavers run by Government Ministries, parastatals, non-governmental organisations, industrial firms and private individuals.

There has been a great increase in student enrolment. In 1964, for instance, technical training institutions had an enrolment of 2,065 students which increased to 8,025 in 1975. To date, these institutions have a total enrolment of 60,000 students.

Technical and vocational training has come through many phases and patterns, and now it is no longer regarded exclusively for the second and third-rate student; but is a very important and integral part of Kenya's education system. It is now accelerated; and programmes of far-reaching importance have been developed.

(6) Objectives of technical and vocational education and training

Over the last thirty-three years, during which period Kenya has been independent, the government has continuously reviewed the education and training system so as to ensure that it serves and satisfies the aspirations of the country's youth as well as cater for the wider interests of national development. It is evident that the development of technical and vocational education and training in Kenya during the three decades can be traced back to the following four major education reviews:

1. The Kenya Education Commission of 1964/65 under the chairmanship of Prof. S. H. Ominde.
2. The National Committee for Educational Objectives and Policies (NCEOP) of 1996 under the chairmanship of the late Mr Peter Gachathi.
3. The Presidential Working Party on Second University in Kenya of 1981 under the chairmanship of Prof. C. B. Mackay.
4. The Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond of 1988 under the chairmanship of Mr J. M. Kamunge.

The Mackay Report culminated in recommending the restructuring of Kenya's education system from 8:4:2:3 to the 8:4:4 system.

This recommendation was accepted by the government in March 1982, and its implementation started in January 1985. As an implementation strategy, the education system was divided into four cycles:

PEP – Primary Education Programme
SEP – Secondary Education Programme
TEP – Technical Education Programme
UEP – University Education Programme.

In this system of 8:4:4, each cycle is terminal. The curricula developed are diversified by injecting vocational oriented subjects at all levels.

The country hopes to achieve the following with improved TVET systems:

- With emphasis on technical and vocational education at primary and secondary school levels, the focus is to ensure that students graduating at every level have some scientific and practical knowledge that can be utilised for either self-employment, salaried employment or further training.
- Reducing the mismatch between supply and demand of skilled manpower and provide for those who would otherwise have wished to pursue further education, moulding the attitudes of the youth towards the world of work.

To this end, the pre-vocational component at various levels of education and training system in Kenya specifically aims at achieving the following:

The Primary Education Cycle

This target the populations of six-year-old children. The primary education aims at providing the children with adequate intellectual and practical skills useful for living in both urban and rural areas.

The primary education curriculum is based on three broad principles which are: improving its quality, content and relevance to cater for the majority of children for whom primary education is terminal, availability to all primary-school-age children, and diversifying primary education in order to enhance competence in a variety of development tasks to enable the pupils to make useful and functional articles.

In addition to academic subjects, the curriculum includes such practical subjects as:

- Home Science (with topics such as needlework, child care, food preparation and care of home).
- Art and Craft (with topics such as drawing, painting, graphic design, collage/mosaic, weaving, ornament making, clay work/pottery, leatherwork, modelling and carving, fabric, design puppetry, woodwork, metal and building construction).
- Agriculture (with practical activities such as growing crops, rearing of domestic animals, poultry and bee-keeping, making farm tools, caring for the soil and environment).

The Secondary Education Cycle

The target population for this level are the children of 14 years. The cycle aims at preparing the learner to make a positive contribution to the development of a society, building a firm and enriched foundation for further education and training, and instilling the kinds of attitudes that are in line with development endeavours of both the individual and the nation.

Along with academic subjects, the curricula includes agriculture, woodwork, metalwork, power mechanics, electricity, drawing and design, building construction, home science, business education (accounts, commerce, typing and office practice), art and design, and music. Students are required to take at least one practical subject.

Technical and Vocational Education and Training

Kenya's main aim of the technical and vocational education and training policy is to improve the quality of training at all levels so that the trained manpower can enhance and sustain a high level of economic development which would in turn improve the quality of life by raising the standards of living.

The technical and vocational education and training programmes are designed to achieve the following national aims and also be in line with the recommendations of the Sessional Paper No. 6 of 1988 on Educational and Manpower Training for the Next Decade and Beyond, and that contained in the Policy Document on the 8:4:4 System of Education of 1st December, 1984:

- To provide increased training opportunities for the increasing number of school-leavers to enable them to be self-supporting.
- To develop practical skills and attitudes which will lead to income-generating activities in the urban and rural areas through self-employment.
- To provide practical education and training skills which are responsive and relevant to Kenya's agricultural, industrial, commercial and economic needs.
- To provide the technical knowledge and vocational skills necessary to enhance the pace of this nation's development.
- To encourage self-employment while at the same time producing skilled artisans, technicians and technologists for both formal and informal sectors at the ratio of 1 technologist to 5 technicians to 30 craftsmen/artisans (1:5:30).

(7) TVET programmes – policy guidelines

The Ministry of Technical Training and Applied Technology was created on 24th March, 1988, and therefore the implementation of the technical and vocational education and training became its responsibility.

In accordance to the government plans to harmonise and rationalise the curricula currently being offered and certificates being awarded by all training institutions in the country, the National Industrial Training Council and the Ministry of Technical Training and Applied Technology organised a seminar on Harmonisation and Rationalisation of Curricula, Examinations and Certification in Technical and Vocational Training from 21-25 November, 1988, at Mombasa Beach Hotel. The aim of the seminar was to discuss the existing technical and vocational training programmes and come up with strategies for harmonisation and rationalising of:

- Curricula, examination and certification
- Recruitment of trainees
- In-plant training (industrial attachment)
- Technical teacher training
- Jua Kali Development Programmes
- Planning and development of training programmes.

The recommendations as listed below, made in the seminar and those of the 1986 committee, laid the foundation of development of TEP. The emphasis was to ensure properly harmonised curricula and certification through KIE and KNEC respectively; for all institutional-based training programmes would substantially assist in maintaining comparable standards of performance, accuracy in determining job levels, and creation of linkages which allow flexibility for both vertical and horizontal mobility of trainees.

(8) Summary of recommendations

1. The Government should streamline all training programmes in order to enhance and sustain high level of economic development.

2. For a balanced economy to exist, there should be a stable base of adequately trained manpower such that the ratio of technologists: technicians, craftsmen and artisan is about 1:10:30.
3. The technical and vocational education and training should form an alternative route through which one can rise to the top.
4. The route to technician Diploma programme should be through the Artisan and Craft orientation programmes. The 8:4:4 should provide linkages on various levels of education and training.
5. The Government should increase training opportunities by making full use of Youth Polytechnics, Technical Training Institutes, National Polytechnics and Public Universities.
6. The Non-Government Organisations (NGOs) and private firms should be encouraged to continue providing training to the youth of this sector.
7. The government should collaborate with industry in curriculum development. In this way, the training system will be harmonised through the use of centrally developed curricula.
8. All curricula for courses outside University should be co-ordinated and approved by the Kenya Institute of Education (KIE). KIE should be strengthened in technical personnel to facilitate co-ordination of these activities.
9. To eliminate the problems of equivalencies and accreditation, the examination and certification outside the University should be the sole responsibility of the Kenya National Examination Council (KNEC). The KNEC should, therefore, be strengthened in the area of skill testing.
10. The Directorate of Industrial Training (DIT) should collaborate with KNEC in the area of skill testing. Therefore, the Regulations/Legislation governing KNEC and DIT should be harmonised in this regard.
11. University Education Programmes (UEP) should be designed to accommodate candidates from both the academic route and technical and vocational education and training route.
12. The Kenya Technical Teacher's College (KTTC) trainees should be exposed to industrial situations if they have to be effective in their instructing/training activity in the TEP programmes.
    The Industry, Directorate of Industrial Training (DIT), Federation of Kenya Employers (FKE), Kenya Association of Manufacturers (KAM), Trade Unions and the government should be partners in this endeavour.
    It will be necessary, therefore, to revise some legislation to facilitate the training, industrial attachment and cost sharing in this exercise.
13. The School Equipment Production Unit (SEPU) should be streamlined in order to produce good quality, low priced equipment and tools to support the 8:4:4 system of education and training. The well-developed Harambee Institutes of Technology should also be used to produce some hand-working tools.
14. Legislation governing Harambee Institutes of Technology should be streamlined if the Ministry responsible for training is to have control over them.
15. The public should be educated to accept vocational education and training as an alternative route for career development. The VOK and Provincial Administration should be used fully for this exercise.
16. The best school-leavers with technical aptitude should be selected for vocational and technical education and training. The timing of selection should be conducted at the same time when Form 1 or University entrants are being selected.
17. The placing of a candidate to the training should be based on interests of the applicant. The interests of a candidate should be obtained from simple aptitude tests. Continuous assessment during Primary and Secondary cycles should give an indication of the candidate's inclination.
18. A scheme of service should be worked out to harmonise remuneration for technically and vocationally trained and academically trained personnel.

(9) Women in TVET

Women comprise approximately 50% of the world population, yet according to the available statistics, nearly 70% of the low-income earners are women.

In Kenya, the present comparative figures in education and training are not very encouraging. In Primary Schools, the population of girls is slightly above 50% and in Secondary Schools it is approximately 40%. In Technical Training Programmes at tertiary level, it is as low as 3%.

In a country geared for industrial take off, it means that the job opportunities for girls and women are going to be seriously affected. However, it is important to note that the programmes introduced under the 8:4:4 system of education are non-discriminatory. The major issues are more of cultural aspects which need to be focused.

(10) Technical teacher training programmes

The effectiveness of any education system is dependent upon quality of teaching and availability of quality teachers at all levels.

The Kenya Technical Teachers College (KTTC) was established to meet the need for a wide range of teachers in technical and business education. KTTC trains teachers for business and technical education in Youth Polytechnics, Secondary Schools, Technical Training Institutes, Institutes of Technology, National Polytechnics, Primary Teachers' Colleges, Colleges for Instructors and Vocational Training Centres.

Since 1989, Kenya Technical Teachers College phased out the initial long-term training programmes of 3 to 4 years and is now mounting 1 to 2 years technical teacher training programmes.

The one-year technical training programmes cater for applicants with technical qualifications and a minimum of two years' work experience in their areas of specialisation. A two-years training programme meant to upgrade the technical skills of trainees while undertaking teacher training is also available.

Technical training programmes offered at the Institutes of Technology and Technical Training Institutes are being expanded and diversified. To meet technical teacher requirements for the new programmes, KTTC has embarked on in-service courses for serving technical teachers in order to upgrade their skills to higher diploma level.

(11) Financing of the TVET

As stated earlier, the economic conditions caused by global economic recession, rapid population growth, adverse weather conditions, influx of refugees and IMF instituted Structural Adjustment Programmes have generated some negative effects on the social system. The adverse economic conditions have affected the efficiency of vocational technical training programmes both internally and externally. It has therefore become a very great challenge to all stakeholders in the technical and vocational education and training to bring out suitable programmes to meet the demands of the economy. The greatest constraints in this endeavour is the scarcity of resources: mainly financial. Financing of technical and vocational education and training programmes has always been shared amongst government, local communities, beneficiaries, religious and private organisations, donors and private persons.

The following are the various sources:

1. State Budgets. The role played by government in financing TVET becomes most necessary, and can never be fully replaced by contributions from other social partners or by the market forces.
2. International Aid. Donor agencies have contributed significantly to the development of technical and vocational training in Kenya. The funds are either disbursed through the Government or Non-Government agencies directly to the training institutions. The funds are used for development purposes especially in the area of buildings, machinery and equipment, as well as for running costs of the institutions.
   The apparent lack of sustainability of the donor-started programmes is a serious problem that needs to be addressed. It was thought that donor agencies and institutions should conveniently build sustainability financing components in the programmes so that when the donor withdraws the funding of programmes and projects they should still be able to expand and to maintain the standards in a self-sustainable manner, either through fees, multi-purposes production units or other sustainable forms of fund-raising.
3. Employers Funding. The industrial sector played a leading role in the country in the training of their required manpower especially during the period 1960s - 70s. This was mainly because during this period there was a critical shortage of technically qualified people and each industry had to train to meet its needs. Employees were sponsored by their employers to undertake courses in approved technical training institutions until 1988 when the policy was changed and self-sponsorship was introduced.
4. Training Levy Fund. Employer funding of training is provided for under the Industrial Training Act, Cap 237. The Act provides for the collection of the Industrial Training Fund through a mandatory levy scheme for all employers of more than four people and currently applies to 11 industrial sectors.
5. Beneficiaries Contributions. The beneficiaries pay funds in the form of fees to subsidise their training. In practice, individuals have financed their training through various ways, including accepting reduced wages during training (e.g. the 20% of salary cost sharing in the Civil Service), and the use of family savings or borrowing of money from other sources to pay training fees. The current government policy is to encourage cost sharing in the financing of all aspects of education and training.

The majority of students in the technical training institutions are currently self-sponsored. However, it is worth noting that while the government is encouraging cost sharing, technical training can be expensive especially in view of the flexibility currently required in the labour market. Also, there are some students who cannot afford to pay the cost of training from their own family sources. To promote equity in the access to education and training, it is noted that the government has stated that the current Students' Loan Scheme for University Students will be extended to students in other institutions such as the National Polytechnics. It is thought that this is a commendable move by the government and that the scheme should be conveniently extended to cover other levels of institutions particularly the Institutes of Technology and other approved specialised Industrial Training Centres and Institutions. In this way industrial training will be sufficiently geared towards meeting the professional/technical manpower required for sustainable industrialisation in the country.

(12) Conclusion and future focus

Kenya's TVET is comparatively developed and targeted at a wider cross-section of the population including the Informal Sector. The current strategies and policy guidelines for the provision of TVET at all levels is a clear evidence of ability to aim for a strong co-ordinated, well-planned and managed training system which is flexible enough to respond to the needs of society, industry, business and, to a larger extent, to the individual in the Jua Kali Sector.

Numerous issues linked up with training such as expansion of training to increase the training opportunities, the provision of adequate financial and human resources, creation of employment for both male and female, and the promotion of the internal sector as a major source of employment for our youth are some of the issues which need to be continuously streamlined and rationalised.

As an effort of trying to meet the nation's development targets including that of job creation to the tune of 4.5 million by the year 2010, the training has to continue being made relevant to cater for the rapid scientific and technological development necessary to transform the Kenyan society each day.

The focus for now and future is to mobilise the available human and financial resources to build a capability sufficient to enable Kenya to achieve her development targets. The policies the government has put in place need to be promoted and enhanced. These include: development of result oriented training policies to stimulate stakeholders' participation in training; the cost sharing strategies; means to sustain the institutional infrastructure and programmes; institutional capacity building – just to mention a few. All these challenges need support from our stakeholders in education and training.

5.2 A Position Paper
by Professor B. Wanjala KERRE

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(1) Overview

Introduction

1. TVET well acknowledge as crucial to notional development within the world of work:
    - UNESCO Convention on Technical and Vocational Education.
    - UNEVOC activities,
    - World Bank Education Policies,
    - National Policies.
2. This paper is meant to sensitise policy makers to TVET beyond the formal sector.

Role of TVET

- Individual growth – knowledge, skills and attitudes
- Preparation for the World of Work,
- National development – human resources, productivity etc.,
- Advancement of Peace – UN Development Report of 1994 recognises peace as the result of freedom from fear of social insecurity, and freedom from economic insecurity, want.

TVET in modern systems

Legislation – Education Acts shortly after political independence: concerns General Education of VOC; training.

Administration

Policy frameworks mainly in place. However, administrative and delivery mechanisms varied; common trends:

- Formal education – schools & colleges,
- Vocational training – UTLS,
- Non-formal and informal training,
- Problem – lack of standards,
- No competitive salaries,
- Need for harmonisation.

Financing

- TVET institutions comparatively more expensive,
- New cost sharing initiative (Senegal Café de Voire, Madagascar, Kenya, etc.),
- All stakeholders to cost share.

Curriculum

- TVET goals and objectives – similar across the board. This addressed acquisition of knowledge and skills for productive employment,
- Offered at primary, secondary and tertiary levels, neglected occupational interests,

- However, most TVET programmes still heavily western oriented, outdated due to new technologies, etc.,
- Trends – broad-based curriculum addressing the needs of scientific and technological sociality.

Major challenges

- Lower status syndrome,
- Dwindling enrolments in formal TVET,
- Changes in workplace – technology, new productivity,
- Relevance to world of work,
- Equity and access – most still kept out.

Broadening the scope of TVET beyond the formal sector

There is a need for multiple roles.

The Government's role

- Provide effective policy frameworks to guide TVET activities,
- Establish effective delivery patterns and evaluate for intended purposes,
- Harmonise TVET administration and management activities.

The role of enterprises & NGOs

- Involve enterprise and NGOs – curriculum matters, policy formulation,
- Introduce education and training levies, rebates etc.

TVET – Institutions

Existing TVET programmes and materials are already past history – need for close collaboration with ministries to forge common stands.

Collaboration/partnership with higher institutions

This may be activated through:

- Research and development activities,
- Exhibitions, trade fares,
- Consultancies.

Conclusion

- TVET is critical to both individual and national development,
- Present legal frameworks and legislation have broad definition that does not sufficiently guide policy framework in planning, administration and implementation of TVET programmes,
- The majority of those who join the informal sector have limited opportunities to benefit from TVET,
- Governments should once and for all address the critical issues of harmonising TVET planning, development and implementation by establishing mechanisms to open up more access to TVET for all. This will need the collaboration of all the stakeholders including enterprise, TVET institutions, NGOs, unions, employer federations and governments.

(2) Introduction

It is no longer debatable whether or not technical and vocational education is an imperative in the preparation of human resources for national development.

The adoption of the Convention on Technical and Vocational Education by UNESCO's member states at the 25th session of UNESCO's General Conference in 1989 and the current UNESCO activities aimed at strengthening the development and implementation of TVET clearly underscore the important role this aspect of education and training plays in the life of any country.

This subregional Seminar is critical in helping member states derive policy definitions that embrace the expanded vision of TVET beyond the current offerings in the formal education sector.

For this purpose, it is important to recall Article 1 of the Convention which spells out the definition of TVET as:

> "referring to all forms and levels of the education process involving, in addition to general knowledge, the study of technological and related science and the acquisition of practical skills, know-how, attitude and understanding relating to occupations in the various sectors of economic and social life" (UNESCO, 1989, Article 1).

We shall therefore critically examine the role of TVET in national development, its place in the formal school curriculum and in the informal sector, and the challenges facing TVET in the informal sector and some future prospects.

(3) The role of TVET in national development

Technical and Vocational education serves the individual by imparting knowledge, skills and attitudes that will be used to procure and sustain gainful employment. Society equally benefits from such human resources development and it is responsible for increased Gross National Product.

The Human Resources Development Report of 1994 (UNDP, 1994, p3) underscores the United Nation's lifelong commitment to engage in a battle for peace on two fronts: the security front (to secure freedom from fear) and the economic and social front (to secure victory from want). The latter is inextricably linked to job security where TVET is a major contributor.

Evidence from World Bank Studies (World Bank, 1988; 1991) and case studies of TVET in the African region (Kerre, 1995) clearly point out that investment in TVET is worthwhile no matter what the economic status of the country may be.

Further evidence from the newly-industrialising countries show that TVET is largely responsible for providing a pool of skilled human resources essential for such critical sectors of the economy as agriculture, manufacturing, construction, communication, transportation and commerce.

With increasing technological development and liberalised world markets, a country's technical and vocational training system will increasingly become decisive in determining the competitive strength and level of development of its economy.

Ever since independence, most African countries have had to grapple with the problem of "too many people looking for jobs and too many jobs going unfilled". While there is a growing number of the unemployed among the educated, there is a persistent shortage of human resources with the technical skills required in various sectors of the economy.

There is a mismatch between available technical human resources and the type of employment opportunities available in the world of work.

(4) TVET in the formal education systems in Africa

In order to appreciate the level of development in TVET and the commitment given by various African governments, an overview of legislation, administration, financing and the challenge encountered may be useful.

Legislation of TVET

The importance accorded to TVET in a given society is reflected in the existing legislation establishing it. It can be observed that legislation dealing with technical and vocational education in most countries came into effect much later after the promulgation of the Education Acts. Technical and vocational education may have been mentioned as was the case with the Ashby Commission of Nigeria in 1960 and in the Kenya Education Act in 1968, but effective policy implementation was to come much later on as revealed in case studies below (UNESCO-BREDA,1995).

Vocational training, however, was well recognised as proven by the establishment of Vocational Training Acts in Ghana (1970), Kenya (1971), Uganda (1979, Swaziland (1982), Zimbabwe (1978). There was a clear demarcation between vocational education and vocational training then. The latter was the focus of the Vocational Training Acts.

After it became obvious that the educational systems adapted from the colonial regimes were mainly academic leading to mass production of unemployable school-leavers, various changes were introduced as each country reviewed and reformed its educational system. Most of these changes came in the 1980s and the 1990s.

In Nigeria, for example, the National Policy on Education of 1981, effected in 1982, laid emphasis on technical and vocational education in the restructured (6-3-3-4) school system.

In Kenya, a series of educational review commissions culminated into the establishment of the 8-4-4 school system in 1985. The curriculum was vocationalised and technical and vocational education was expanded beyond the confines of the formal school curriculum. A new Ministry responsible for post school vocational education and training was established in 1988 and a new vision for TVET articulated in a Sessional Paper on Manpower Development (Kenya, 1988).

In 1984, Zimbabwe replaced the 1978 Vocational Training Act with a Human Resources Planning and Development Act. The Act moved to the Ministry of Higher Education in 1988 from the Ministry of Labour Planning and Social Services. In 1994, the Act was revised to include the Administration of Teacher Education.

Ghana's constitution of 1992, through articles 25 and 38, reviewed its education system and revitalised technical and vocational education. This was further complemented by the Polytechnic Law in 1992 which established polytechnics as tertiary institutions.

Swaziland set up a National Educational Review Committee which established a Special Committee in 1990 to study pre-vocational education. As a result of the committee findings, the government has proposed the provision of a diversified, competency-based curriculum to expose students to vocational subjects in agriculture, home economics, business and technical studies.

In Uganda, an Education Review Commission submitted to the government a White Paper on technical and vocational education in 1992. The paper called for the restructuring of education to include technical and vocational education from primary to tertiary levels. It called for the integration of TVET and business education as well as equipping technical training institutions with modern tools and equipment.

An analysis of the evolution of education in Congo from the 1960s underlines important steps toward the implementation of an educational policy with more or less well-defined features. All of these characteristics depict the will to promote democratic access to education.

In 1965, all schools were nationalised and put under state control. From 1970 to 1977 the background document "l'Ecole du Peuple" was produced.

In 1991 "la Conference Nationale Souveraine" ("the Sovereign National Conference") was held which confirmed the failure of "l'Ecole du peuple" ("the Peoples School") and initiated several steps to reorient the educational system. These were:

- The promotion of technical and professional training by reforming the programme and adapting it to the socio-economic context,
- The active participation of socio-economic partners in the development of education,
- The creation of a state secretariat for technical training.

In Senegal, The Orientation Law of National Education of 1971 was the first law on national education and training in the country.

It was further reviewed and adopted in February,1991. This law includes, among other things, two major innovations aiming at systematising a permanent basic education and a better oriented technical and professional training. This was conceived so that the national and permanent education system was to serve the Senegalese people. It aims completely and definitively at eradicating illiteracy as well as the professional improvement and social promotion of all citizens by improving the living and employment conditions and increasing the productivity of the worker.

This new law takes into consideration various activities as early as at the primary-level basic cycle with the objective of promoting manual work and introducing children to technical activities.

(5) Administration of technical and vocational education

Responsibility for TVET at the policy level is clearly manifested in existing legal and constitutional frameworks. However, administrative responsibility at the institutional level is very much diversified and varies from one country to the other. This diversity is mainly due to the uniqueness of comprehensive technical and vocational education.

Three distinct features mainly account for it:

1. The educational component is formal and is taught in the school curriculum.
2. The training component is provided in both formal and informal training institutions.
3. Non-formal and informal TVET is offered by non-governmental organisations, private proprietors, religious organisations etc.

The situation in Ghana, Zimbabwe and Kenya can illustrate this observation. In Ghana, the Ministry of Education is responsible for General Education, Polytechnics, Technical Teacher Education Colleges and the Institute of Professional Studies. The Ministry of Employment and Social Services is responsible for the National Vocational Training Institute (NVTI) and Integrated Community Centre for Employable Skills (ICCES), while the Ministry of Transport and Communication is responsible for Ghana Technical Training Centre. Other technical and vocational training programmes are offered in different ministries and departments including the office of the Head of the Civil Service, Ministry of Agriculture and the Ministry of Health.

In Zimbabwe, school-based technical and vocational education is administered by the Ministry of Education, Culture and Sports, while the administration and supervision of technical colleges is the responsibility of the Ministry of Higher Education.

In Kenya, the Ministry of Education is only responsible for the formal school curriculum including Primary, Secondary and Teacher Education Colleges for these levels. The bulk of the technical and vocational education and training programmes are offered in institutions such as Youth Polytechnics, Technical Training Institutes, Institutes of Technology, National Polytechnics, Technical Teacher Training Colleges and National Industrial Vocational Training Centres (NIVTC) which fall under the Ministry of Research, Technical Training and Technology (MRTTT). Other Ministries including Agriculture and Livestock, Health, Communications and Lands and Settlement do have their own departmental schools catering for their specific training needs. There is a growing number of private schools and colleges offering various TVET programmes as well.

In most Francophone countries, the Ministry of Education has the overall responsibility for formal education including technical and vocational education. However, some technical and vocational training programmes are run by other Ministries.

It is quite obvious that with increased demand for occupational training and the escalating cost of training, there is a need to harmonise the provision of TVET to avoid the duplication and wastage that is currently going on. Harmonisation will further enhance quality and relevance with appropriate certification.

(6) Financing

Technical and vocational education and training programmes are expensive to run compared to general education. It has been estimated that the cost of one technical school is equivalent to two or three schools offering general education.

Previously, governments undertook total responsibility to finance TVET with some assistance from donor agencies.

Today the situation is becoming more difficult as governments are faced with difficult choices to cut back spending on education which has, on an average, been taking up to as much as 40% of the national budget in some countries. Since most African countries depend heavily on foreign aid and mainly from the World Bank and the International Monetary Fund (IMF), the Structural Adjustment Programmes imposed by these institutions have adversely affected the financing of TVET as well.

Ghana, Nigeria and Uganda have indicated that their governments still shoulder the entire cost for public TVET programmes. Other countries, except Kenya, have not shown any alternative arrangements yet (BREDA, 1995).

The Kenyan government introduced a cost-sharing policy in 1988 when it called upon the communities, parents, and beneficiaries of TVET to assist the government in raising additional funds to accelerate the expansion of training opportunities to increase access without compromising quality and relevance. Educational and Training Institutions at all levels have been challenged to engage in various fund-raising activities including the installation of production units, farming, and the provision of consultancies to business and industry.

Similarly, Senegal, Côte d'Ivoire, Madagascar and Zimbabwe have introduced cost-sharing policies in their educational systems.

Côte d'Ivoire has introduced a training-levy fund, run by the Fonds National de Regularisation (FNR), in which enterprises contribute 1.2% of their salary payments for employees. Enterprises can use 0.5% of their contribution to offer training for their own employees. The balance goes for training in small enterprises and individual cases where proposals have been submitted and approved.

As a result of the Structural Adjustment Programme, Cameroon has created the National Employment Fund (NEF) with the following objectives:

- To put together the offers and requests for employment,
- To make available information on employment opportunities,
- To give adequate information on job market to job seekers,
- To support those who wish to be self-employed or create enterprises.

The resources of NEF come from the African Development Bank (ADB), the World Bank, the trainers (15% of training cost), the enterprises involved in the co-funding of the Employment Diploma Programme and the NGOs.

In Senegal, as in all the other countries, the financing and regulation of technical and professional training have been assured a primary place by the State.

Apart from the State, other resources come from international aid, the NGOs and, mostly, the enterprises. The enterprises annually pay to the State a tax called a lump sum contribution for the employers (CFCE). 6% of the CFCE is used in the National Office for Professional Training (ONFP) for its functioning and its training activities. This 6% amounts approximately to 300 million CFA.

A study is presently being undertaken for the creation of a Fund for Technical and Professional Training Financing.

All these initiatives indicate the great concern of various states to have reliable financing mechanisms for technical training at all levels.

It is very unlikely that more funding for TVET will be available in the foreseeable future. It is incumbent on all African States currently heavily dependent on foreign aid to explore more vigorously alternative ways of financing their education and training programmes.

(7) TVET curriculum in schools

TVET in the African region is offered alongside general education either as a part of the general comprehensive school curriculum where all leavers at various levels have access, or a separate system where only those identified as "appropriate" pursue it. Examples of these include Kenya, where the 8.4.4 curriculum is vocationally oriented, and Uganda, where technical schools and technical institutes operate parallel to lower-secondary and higher-secondary levels respectively.

Today there is a tendency, however, to move toward the comprehensive school curriculum where TVET subjects are offered as a part of general education.

The purpose and objectives advanced for TVET in any given country delineate the scope and breadth within which the curriculum is offered. An overview of case studies of TVET in Africa clearly point out to uniformity of purpose and agreement on several objectives which include the following:

1. To expose pupils at the basic level to a wide range of practical activities to stimulate their interests toward vocational careers.
2. To facilitate the interpretation, application and translation of basic and scientific knowledge in the production of goods and service.
3. To inculcate an appreciation of the dignity of human labour as an invaluable resource base.
4. To equip learners with relevant productive and entrepreneurial skills that will prepare them for gainful employment.
5. To provide skilled labour to match the demand for human resources in the scientific/technological and commercial sectors of the nation's economy.
6. To refine and consolidate indigenous activities and technological skills in order to produce products of aesthetic and cultural value.
7. Increase scientific and technological literacy.
8. Provide a sound foundation for further education and training in the spirit of lifelong learning.

The extent to which credibility is given to national policy on TVET in the school system depends largely on the types of subjects offered and the weighting given to them compared to other subjects in the school curriculum. If they are not introduced early enough and if they are merely optional then both learners and society at large will not take them seriously.

TVET subjects offered in the school curriculum in most countries still reflect traditional trade oriented content without much regard for technological change taking place in the world of work.

In most cases, TVET subjects are offered from secondary school level except for a few cases like Kenya where subjects such as agriculture, art and craft, business studies, home science and art are compulsory at the primary level.

At the tertiary level, TVET is usually offered to those who have completed secondary-level education. It comprises of a wide range of courses offered in technical training institutions and Polytechnics. The technical institutes offer craft and technical courses while Polytechnics often offer technical and diploma programmes at a higher level. There are proposals for some Polytechnics to start degree programmes in TVET.

In Francophone countries, "Ecoles Supérieures Polytechniques" are some of the best and highest technical institutions for training higher-level technical human resources. Cameroon established Institutes of Technology in three National Universities in 1993.

Existing universities in several African countries do offer degree programmes in vocational fields such as agricultural education, business education, home economics education, music and art, but these have not been widely acknowledged as vocational education programmes. At present there are a few universities in Africa, such as Moi University in Kenya and the University of Malawi, which offer B. Ed degrees in Technology Education meant for secondary school teachers of technical subjects.

There are other forms of vocational training particularly at the artisan and craft levels for industry and in other cases, there are apprenticeship programmes which are co-ordinated by the Directorate of Industrial Training, e.g., in Uganda and Kenya.

(8) Major challenges

Whilst TVET is recognised and embraced by all, it faces unique challenges which must be addressed before its impacts are felt by the majority who need it.

a) Low priority

TVET currently experiences lower participation rates in the formal education system for several reasons:

- It is relatively more costly and thus fewer individuals and institutions can afford it,
- Job opportunities in the formal employment sector have greatly dwindled,
- TVET personnel still earn less compared to their peers in other occupations.

b) The changing work place

Due to modernisation in the production of goods and services, business and industry today demand new qualifications that traditional education and training does not provide. Most African economies being heavily dependent on foreign goods and services are constantly being subjected to new technologies through a wide range of products from developed countries.

c) Relevance in TVET

Formal TVET institutions are ill-equipped to keep pace with the state-of-the-art knowledge and skills in existing enterprises. Current graduates of these programmes no longer fit into the dynamics of modern business and industry.

d) Equity and access

There is rapid growth in the informal sector where the majority of youth currently take refuge as opportunities in the formal sector diminish. This means that the majority of future workers do not have access to TVET for occupational preparation. Those who continue with formal education and training at the secondary and post-secondary levels are usually not more than 30% on the average and only a small percentage of this group enrols in TVET programmes.

(9) Future prospects

Despite the above challenges facing TVET in Africa, it is important to recognise that some countries have already undertaken some innovative measures including:

- Educational reform where curricula are vocationalised to ensure greater participation,
- The introduction of several cost-sharing measures involving all stakeholders,
- The introduction of legislation to co-ordinate and regulate TVETT for maximum efficiency, and
- Undertaking the general economic restructuring aimed at stimulating economic growth in order to create more employment opportunities.

There is need, however, to examine and identify key roles that the stakeholders in TVET (Government, Enterprises and NGOs, TVET Institutions and beneficiaries) can play to broaden the scope of TVET beyond the formal sector.

(10) Government contribution

As an integral aspect of general education, technical and vocational education is, first and foremost, the government's responsibility. Whether in formal or non-formal settings, TVET should have the necessary legislative backing to ensure its successful implementation.

It is therefore the responsibility of the state to establish and maintain a well-functioning national TVET and training system. Such a system entails two major functions.

The first is a core function which relates to the development of a TVET system in line with the country's development needs and priorities. This function is essential and cannot be transferred to the private sector or any other party.

In this respect, the primary functions of the state consist of:

- Policy formulation,
- Setting the legislative and normative framework of the training system, establishing quality standards, testing and certification to ensure consistency,
- Human resources planning to ensure relevant and adequate data is available to guide training,
- Securing financing for TVET either directly or indirectly,
- Ensuring effective delivery of TVET by developing institutional capacity for curriculum development, training of trainers and managers of training, testing and certification,
- Evaluating the overall performance of TVET to ensure proper application of standards and policies,
- Promoting active participation of partners through incentives.

The second function of the government relates to delivery of training. It is the experience in many countries that TVET delivery is increasingly being shared by the private sector.

If the core functions of the state, as indicated above, are left entirely to the private sector without adequate control, the quality, consistency and equity aspects of TVET may be compromised. The critical issue, therefore, is the one of determining the degree of state control which may vary from one country to another.

(11) Contribution from non-governmental organisations and enterprises

Technical and vocational training is expensive to operate. Most non-governmental organisations and enterprises which are business oriented often avoid it if they can.

There is greater need today for governments to seek innovations for the renewal of training systems and the redefinition of the new and complementary roles of the state and enterprises in training and development.

Enterprises in partnership with the state have a strategic contribution to make in the process of improving relevance, effectiveness and efficiency of training systems by bringing them closer to markets, and by increasing training quality, capacity and productivity.

TVET institutions lack the characteristics inherent in the nature of business and industry such as being market driven, flexible, adaptable and able to respond rapidly to change.

Critical in this state enterprise partnership is the government's role in providing a conducive policy environment in which all the social partners, government, employers' and workers' organisations and communities, participate fully and freely.

Non-governmental organisations and enterprises can, thus, make a significant contribution through state regulatory and policy guidelines and incentives. They can be encouraged to take particular interest in the delivery of training for:

- Growth for initial entry into employment,
- Retraining or upgrading of currently employed workers including those threatened by redeployment,
- Unemployed workers for re-entry into employment.

(12) Contribution from formal TVET institutions

Existing TVET institutions have facilities and human resources that are often under-utilised. Evening programmes and vacation-time sessions can easily be mounted to continue providing TVET to a wide range of participants from the non-formal/informal sector.

These institutions can also be used as educational and training centres for:

- Continuing education to improve the literacy rates in respective communities,
- Training centres for supervisory and managerial personnel from enterprises, and
- Technical skill upgrading to improve the proficiency and efficiency of production in the informal sector.

Technical and vocational education personnel should be encouraged to assist enterprises in research and diagnosis of problems pertaining to production, marketing, quality control, etc.

There is a need, therefore, for closer relationships between TVET institutions and enterprises in order for them to benefit from each other's experiences. This partnership can be fostered through:

- Enterprises serving on curriculum boards or panels,
- Attachment of the trainees and teachers/trainers to industries for practical experience,
- Collaborative research activities,
- Part-time teaching for senior industrial personnel in the institutions.

(13) Conclusions

It is quite obvious that the contribution of technical and vocational education to national development and individual preparation for a career is much greater than has been acknowledged.

However, due to the high cost, amongst other constraints, fewer people amongst the majority who join the informal sector each year ever get an opportunity to benefit from TVET.

Rather than call for another TVET system for the informal sector, and for purely economic reasons, it is far better to improve on the existing TVET system to make it more comprehensive, broad-based, accessible and affordable to allow for greater participation by those in the informal sector.

There is a need, therefore, for the stakeholders and beneficiaries to collaborate in strengthening the TVET system for the benefit of all.

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"The Existing National Set-Up in Ethiopia" by Mr Mesfin Terefe

5.3 TVET Beyond the Formal Sector in BOTSWANA

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(1) Background

There are mainly three types of systems providing VET in Botswana, being the government owned and funded Vocational Training Centres (VTCs), the community-based autonomous Brigades Centres and the business-oriented Private Vocational Schools.

The first two types run a fully recognised system comprising of three levels, namely, Trade Tests C and B and the National Craft Certificate, thus providing a framework of certification for many of the vocational training programmes. It currently covers 31 different occupations at the Trade Test level and 18 at the National Craft Certificate (NCC) level and there are plans to extend its scope. The occupations covered are being extended to include commercial areas as well as industrial areas.

The situation in the private vocational schools is uncertain. The various vocational courses offered by this sector change all the time depending on the availability of both human and infrastructure resources as well as on the ability of the institutions to run profitably or not and thus determining its sustainability. Levels of offered training often vary from one centre to another, with equally a variety of validating bodies and/or self-validations. Standards become almost impossible to assess and ensure in this situation.

(2) Vocational training centres

The core component of Vocational Training provision is the employer-based training provided through the apprenticeship scheme. One of the recommendations of the first Commission on Education, which did not appear in the 1977 National Policy on education, was the proposal to establish a national apprenticeship scheme. However, prolonged discussions between the prospective stakeholders took place outside the framework of educational policy and in 1983 the Apprenticeship and Industrial Training Act was passed. The Act laid the basis for major changes to craft-level training, which were initiated in 1987 when the associated regulations were promulgated. The regulations made provision for a four-year period of apprenticeship with 9 months on-the-job training and 3 months of institutional training each year for those holding the Junior Certificate. The scheme began in 1987 under the auspices of the Directorate of Apprenticeship and Industrial Training (DAIT) and the Madirelo Training and Testing Centre (MTTC) in the department of Labour of the Ministry of Home Affairs. The Ministry of Education's Department of Vocational Education and Training (DVET) provided the institutional training through its institutions which were purpose-built between 1986 and 1988.

1987	*1998*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*
100	133	387	389	392	424	485	513	515	506

Table 1
Number of New Apprentice Contracts per Year
Source: MTTC

After a slow start, the apprenticeship scheme seems to be developing well though it has not received adequate priority and resources so that a number of problems remain (such as inadequate supervision of the on-the-job training component) due to under-staffing at the MTTC.

Another element of the vocational education and training provision is the full-time pre-employment training offered by DVET at the VTCs. This two-year institution-based course was initiated in early 1988 when it became apparent that the VTCs would be under-utilised if they only served the training requirements of the Apprenticeship Scheme.

1988	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*
493	0	727	96	132	909	201	1143	860

Table 2
Annual Intake of two-year full-time trainees in the VTCs
Source: DVET

The full-time course was introduced primarily to increase VTC utilisation and it was envisaged that the course would be phased out as the number of apprenticeships increases. The unplanned introduction of the course has certainly created a number of problems: for example, there is inadequate equipment for practical training. The course leads to no formal qualification, but trainees take the first two assessments of the apprenticeship scheme, and successful completers who can get an apprenticeship contract are therefore given two years of exemption.

(3) The Brigades Movement

A distinctive feature of vocational training provision is the Brigades. A Brigade is a small community organisation which offers vocational training at the semi-skilled level and also engages in income-generating production activities and rural development projects. Each Brigade is an autonomous community-controlled body, although government is represented on the Board of Trustees and provides financial and technical support. The idea of the Brigades started in 1965 as a response to the primary school-leaver problem and they developed rapidly during the 1970s. In 1977, the Brigades Development Centre (BRIDEC) was established as a part of the Ministry of Education to coordinate Brigade operations, provide central professional support and administer government funding.

The first National Commission on Education was impressed by the Brigades' efforts to provide a low-cost system combining education and work, and it recommended continued government support to the Brigades. However, these recommendations were among those deferred, so that the Brigades are hardly mentioned in the 1977 National Policy on Education. In fact there was a financial and management crisis in the Brigades in the late 1970s and this, coupled with a period of policy indecision in government in the early

1980s, led to a decline in intake figures as indicated in Table 3.

1978	*1980*	*1982*	*1984*	*1986*	*1988*	*1990*	*1992*	*1994*	*1996*
950	600	650	620	854	1111	1497	1850	2529	3515

Table 3
Intake (Brigades)
Source: VET

The potential of the Brigades as an element of the VET system was reaffirmed in 1985 in National Development Plan 6 and, by 1996, there were 37 Brigades Centres involved in training.

At the moment, the main programme in the Brigades is a three-year course for Standard 7 holders leading to Trade Test C, with work experience provided in the production units of the Brigades. However, increasingly the target group has become Junior Certificate (JC) holders and programme changes are being made. The Ministry of Education through the Department of Vocational Education and Training (DVET) provides assistance to the Brigades by a per capita grant for vocational training activities, provision of capital funds for infrastructure development and professional support. Efforts are being made to improve the quality of training by upgrading the standards of instructors and facilities, to diversify the range of trades covered, and to raise the level of training to NCC in some Brigades Centres.

(4) The informal sector in Botswana

The Private Vocational Schools provision has been studied only recently to establish areas of coverage and levels of qualifications awarded. Until then, there has been no reliable information to enable us to say more about this form of VET provision.

(5) Size of the enterprises

The scale and extent of the informal sector in Botswana has been found to be difficult to ascertain. This is because of the nature of the informal sector in the country. Another reason is that some of the activities of this sector are seasonal and some enterprises do not always have a permanent place of operation.

However, according to the Peer Consultants' study of February 1997, the scale of informal economic activity in Botswana is significant. For example, in 1992 it was estimated that up to 48,000 small and micro-enterprises employed 88,000 people, this being 20% of the total national labour force. The same study has noted that small and medium enterprises (SME) in Botswana seem to employ fewer persons per 1,000 inhabitants compared to those in other countries such as Swaziland and Zimbabwe where SME employ twice as many.

Available evidence points out that the tendency for the size of enterprise is usually towards self-employment. A study by the Ministry of Finance and Development Planning (MFDP) and USAID, conducted to determine the characteristics of the labour force in the informal sector, found that the majority of those employed in this sector in Botswana are women. For example, the study conducted in 1980 by the Ministry of Commerce and Industry estimated female participation in the informal sector to be 58%. Furthermore, another study conducted by Naraya-Parker in 1982 in the Southern District of Botswana found that 62% of producers were women. A similar high figure was recorded in a survey conducted in Gaborone in 1993 by Naladi Baseline. Evidently the survey found that 75% of the informal enterprises in Naledi were owned and run by women.

(6) Training for the informal sector

The element of non-formal or informal type of vocational education and training has not been categorically addressed in explicit terms, but rather implied where the informal employment sector is addressed. Recently, there have been a number of studies conducted on different aspects of VET. Among them is that concerned with "Structure of the Informal Sector: National Training Policy Study". A report of this study was presented by the same Peer Consultants in February 1997. In consulting other similar studies conducted before, Peer Consultants found that:

Information on the educational levels of workers and/or owners of those in this sector show that the informal sector employs people with little or no education at all. Several studies (for example, Somolekae, 1989, 1994, Alexander et al. 1983, MFDP/USAID 1992 etc.) have come up with similar results. In the MFDP/USAID study (1992) "21% of small and medium size enterprises (SME) had no education at all, while as much as 40% had only completed primary education". The educational levels for women were noted to be much lower than those of men; i.e., 17% women, compared to 45% males, who had only completed primary education. Somolekae (1994) found that 29.5% of the entrepreneurs had no education at all, while 53.2% had only primary education (including those who did not complete their primary education).

The University of Botswana (UB) study, referred to above, on the other hand found that operators of micro-enterprises have completed on average 6.4 years of schooling, and that educational levels for both men and women are the same. A recent Ministry of Commerce and Industry (MCI) survey of small manufacturers also showed that half of the entrepreneurs were illiterate or had attended school at primary level only.

(7) Training levels

With this low educational background, it is hardly surprising that only a small amount of informal entrepreneurs have had some kind of technical training. The UB survey identified 3% of those sampled had undergone technical training, while relatively more skilled people were active in manufacturing enterprises. Obviously this is a reflection that, so far, the formal sector has always been able and willing to absorb the skilled corps of the Botswana workforce. This finding is also supported by a recent tracer study of Brigade graduates (Fidzani/Mafela 1995). Although some methodological constraints were conceded, the study showed that most of the graduates go into employment, while the rate of self-employment is not as high as would be expected. Exceptions were the textile and bricklaying trades.

It is clear that informal and non-formal VET which primarily takes place at the working place needs to be given a high consideration in policy formulation. The anticipated introduction of competence-based modularised training should take into account and award, in the form of certification, competencies gained through non-formal and informal means.

(8) The need for a National Training Policy

Every nation is striving to reach the highest level of development where poverty, disease and hunger could be drastically reduced. In the case of developing countries such as Botswana, extreme dependency on other countries will also be reduced. It is an accepted belief that for true development to take place, Vocational Education and Training should be made more accessible to reach even the most disadvantaged members of the society. For this to be realised, alternative methods of provision to the traditional formal system would need to be considered to help to transform the functioning of the recipients of Vocational Education and Training in Botswana. In doing so, the VET system will have to involve trainees who bring with them different educational attainment levels and experiences from different types of environments.

Given the circumstances, training should be meant to help individual trainees develop critical thinking as well as the ability to transfer learnt skills into real life situations. During training, participants should also learn organisational concepts in their specialist areas, develop insights, and learn how to respond to situations and improvise where necessary.

Botswana, like other countries of the world, is striving for quality Vocational Education and Training; for if the VET system ill-prepares its participants, it can then ultimately leave painful scars that can only impede development of small local industries.

The government of Botswana has recognised the problem situation described above and it intends to push ahead with the development of Vocational Education and Training. Up to about 1993, apart from the apprenticeship scheme as outlined in the Apprenticeship and Industrial Training Act, a successful and clear perspective for the development of vocational education in Botswana had not occurred. Unfortunately, the weak industrial base in Botswana hinders a real breakthrough of apprenticeship training.

(9) Policy formulation

The 1993 National Commission on Education led to a major Revised National Policy on Education which, for the first time in the history of Botswana, put a lot of emphasis on the development of a comprehensive VET system (Government White Paper No. 2 of 1994). The commission proposed the development of a National Training Policy which should embrace the following scope and objectives:

Training must be made a way of life, and lifelong training inculcated as part of the national vision of Botswana. At the individual level, through school, public education and debate, programmes should be instituted to create understanding and acceptance of the indispensability of training at all levels and the desire and will to pursue it. Training must be explained as continuing lifelong and adapting to changes in demand and technology. At the employer level, training must become a part of investment and the trained workforce an employer's most prized asset.

At the national level, with open access to 10 years basic education near achievement, the social and economic goals of human resource development need to be defined, and training strategies developed for the mass of the workforce and school-leavers to achieve them. The overall scale of the training effort must be expanded. The broad targets for the development of institutional training, employer-based training and the private sector training industry should be established.

All providers must be drawn in to supply the need. The operational policies should clearly define the responsibilities for bearing the substantial investments which will have to be made. It is necessary to define the goals, objectives and operational policies, with resources to achieve them, to meet targeted human resource requirements. Priorities have to be established to allow for the rational application of subsidy, cost-sharing and market-pricing. The private training institutions have to be encouraged to develop their full potential.

At the level of training implementation, the sectoral coverage and the modes of training will have to be enlarged. Apprenticeship alone will not be enough.

Institutional and employer-based training must be encouraged to expand. The mechanisms and incentives for doing so will have to be spelt out.

Skills training has to become a joint responsibility within the tripartite partnership of the government, employers and unions. The partners of training have to become further involved in policy, planning and decision-making. The National Training Policy will need a strong centralised executive operating within a well-developed framework for consultation and co-ordination among the training partners. There will have to be quality assurance through performance monitoring.

Underpinning the delivery of training is the training infrastructure. At the heart of this is the process of extending step-by-step the range of the National Skills Standards which determine the quality of the trained workforce. The system of certification will have to be further refined to accommodate the enlarged scope and forms of training. Effective and efficient training also depends on having good course design, curriculum and instructional materials available to all training providers. The investments in these professional areas cannot be neglected.

Above all, quality is determined by the expertise, skills and commitment of the institutional and company trainers, training managers, and the professional expertise of the training designers. A paramount objective will be building a highly professional trainer force to sustain the system.

(10) Conclusions

The National Training Policy Reference Group that was formed to respond to the above has progressed well and has presented a draft policy document at a consultative seminar for stakeholders on May 12-13 1997 in Gaborone. It is anticipated that this policy will attempt to relate to all concerns regarding the overall status of the VET system in Botswana.

Ways and means for skills upgrading and development through informal sector training in Botswana are weak or non-existent and developments aimed at reversing this situation have been long overdue.

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5.4 Existing Set-Up in ETHIOPIA by Mr Mesfin TEREFE

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Vocational education was introduced into the Ethiopian education system in the middle of the 1940s. Prior to that period, craftsmanship such as metal smelting, weaving, leatherwork, jewellery and pottery practice remained in a traditional form in the hands of social groups categorised as social outcasts for centuries. Some of the only vocations of social acceptance were clerical, judicial, military service, and tilling the land. In fact, the only jobs of vocational nature with social acceptance were farming and home-making. The institutionalisation of vocational education was obviously preceded by social attitudinal deterrents. As a result, parents were less inclined to send their children to vocational schools. They were afraid that, as practitioners of craftsmanship, their children would also be confronted with the same social degradation that made pariahs of the traditional craftsmen in the past.

However, the institutionalisation of vocational education coupled with the job opportunities that the programme enhanced, has tremendously changed the traditional deterrent attitudes that young people had toward craftsmanship. The majority of high school students now aspire to join vocational areas.

Over the years the number of technical and vocational schools has been rising slowly under different sponsors and organisational patterns. The broad categories of sponsors are:

1. Governmental sectors,
2. Parastatal organisations,
3. Missionary agencies,
4. Private companies and individual entrepreneurs,
5. Labour and employers associations.

(1) Informal vocational training prior to the New Education and Training Policy of Ethiopia

Until recently there were only seventeen technical and vocational schools at the 10+3 level serving the entire population in the country. Obviously, the seventeen technical-vocational schools with a total enrolment capacity of barely four thousand, an insignificant proportion of the school-age population, serve the formal sector only.

Informal technical and vocational education was used as far back as 1976 to train the rural population with rudimentary knowledge, skills, and attitudes needed for its effective contribution in the economic, social, political and cultural development of the country (Zewdie, T., et al, 1995).

According to Zewdie, T. et al (1995), the objectives of the Basic Development Education Programme Project (BDEP) – which is part of the international efforts made to make education accessible to a wider population and make it more development oriented – were to:

- Provide education that will help the people develop their communities,
- Conduct research and testing on basic technology,
- Distribute researched and tested samples for further testing and research in the field,
- Prepare utilisation guides for equipment and relevant materials to be distributed to Community Skill Training Centres (CSTCs) and Basic Development Education Centres (BDECs),
- Co-operate with the concerned and relevant institutions on producing reading materials based on technical findings,
- Train personnel from development ministries and agencies in the production and utilisation of various technological devices, and
- Sensitise rural communities with regard to maintaining ecological equilibrium and proper utilisation as well as assisting and guiding the communities on such concerns.

The CSTCs were used for training a select group of the rural population who, in turn, would train their newly acquired skills and new basic technologies to the wider peasant population in the BDECs. However, due to many constraints, out of the 408 established CSTCs in 1987 only 121 of them were active.

It is expected that in addition to the actively functioning CSTCs and about fifty private training centres located in urban areas, the new 25 government skill-development centres dispersed in four of the country's regions will enhance the dissemination of technical and vocational education beyond the formal sector. A greater portion of the population will benefit; more so, as regions allocate the required resources for expanding such skill-development centres according to the needs of human resource development in their respective areas.

(2) Implications of the New Education and Training Policy

The National Education and Training Policy of the Government of Ethiopia issued in April 1994 is considered as a step forward in the right direction towards the development of education in general and the revitalisation of technical and vocational education in particular. The policy addresses technical and vocational education beyond the formal sector.

The New Education Policy focuses on equitable geographic and demographic distribution of education in general, with a stratification of vocational education according to socio-economic needs. In Ethiopia, as in any developing country, the schools are located in urban areas and towns addressing the privileges of the minority of the population, while the greatest majority of the rural farming population have been ignored for the past many years. It is not only unjust to undermine the majority of the tax-payers' interests, but it is also inconceivable to think of a meaningful economic development while the vast majority of the population possessing the greatest human resources potential is neglected.

The New Education Policy intends to tap on this immense human resources potential by making both general education and vocational education accessible to the rural population.

In the New Education Policy, technical and vocational education beyond the formal sector runs parallel to general education with open-exit and open-entry between the two education systems, while it is interwoven with formal technical and vocational education which structurally forms its apex.

According to the Technical and Vocational Education Programme Implementation of the New Education and

Training Policy issued in June 1996, technical and vocational education is classified into four training levels consisting of trades of different categories. The four levels of technical and vocational education that will be offered under the new scheme are:

1. Basic General Vocational Training (beginners level).
2. Medium Technical and Vocational Training (semi-skilled level).
3. Advanced Vocational Training (skilled level).
4. Technical and Vocational education and Training (high-skilled level).

The New Education and Training Policy of Ethiopia stipulates that general education will run parallel to technical and vocational education and that there will be an open-entry open-exit between general and technical and vocational education depending on the performance and interest of the student.

(3) Implementation of the New Education and Training Policy

Steps taken so far to implement the New Education Policy indicate that the government is committed to the effectiveness of technical and vocational education by stating "... the relevance of education and training to the demands of societal needs and potentials have not only stimulated interest in non-formal training but also have created conditions to promote national commitment to address mass welfare".

Various articles in the Education and Training Policy Handbook (1994) stress the commitment of the government to the provision of technical and vocational education in both formal and beyond the formal sector. They spell out the following aims:

- To satisfy the country's need for skilled human resources by providing training in various skills and at different levels,
- To make education, training and research appropriately integrated with development by focusing on research,
- To provide education that promotes the culture of respect for work, positive work habits and high regard for workmanship,
- Non-formal education will be concrete in its content, focusing on enabling the learners to develop problem solving attitudes and abilities,
- Parallel to general education, diversified technical vocational training will be provided for those who leave school from any level of education,
- Training will be provided in agriculture, crafts, construction and basic bookkeeping in the form of apprenticeship for those of the appropriate age and leaving primary school,
- Technical and vocational training in agriculture, industrial arts, construction, commerce and home science will be provided after primary education for those who may not continue general education,
- Technical training will be provided for those who complete grade ten for the development of middle level human resources.

The implementation programme of the technical and vocational training focuses on:

1. Producing competent instructors;
   - The competent instructor is responsible for technical skill, knowledge, attitudes and the environment. The vocational educator is expected to be occupationally competent,
   - The instructor is also expected to be professionally competent. The instructor needs to identify what is important in the curriculum and demonstrate mastery of communication skills.
2. Providing trainees with skills and knowledge relevant to the labour market and national needs by:
   - Designing a curriculum based upon analysis of the needs of the labour market,
   - Making learning objectives, equipment and facilities replicate or simulate occupational needs,
   - Conducting follow-up studies,
   - Effectively employing advisory committees from business and industry.
3. Benefiting the student with attaining and retaining job employment. This may be maximised by:
   - Evaluating the programme periodically,
   - Using alternate ways of instruction and appropriate media,
   - Pursuing fair recruitment criteria policies and offering training based on labour trends.
4. Enhancing programme maintenance and improvement through periodic evaluation.
5. Running a programme with adequate financing which does not incur unnecessary costs to the students is also highly essential.
6. Administrative support by the schools, school board and legislation is also indispensable for the maintenance and improvement of a technical and vocational education programme.

The single vital resource of any nation that makes a tremendous difference in the stimulation and growth of its economic development is a trained human resources. Although its significance is recognised by educators it is more often than not neglected. In the existing global market economy it is generally believed that the survival of any nation depends on a competitive workforce. That is why it is of paramount importance to revitalise technical and vocational education at different skill levels.

The responsibility of revitalising technical education should not be left to the government. It must get the support of business and industry, the community, the public, labour, and all sectors of society if it is to be of sustainable service to the nation.

(4) Profiles of the technical and vocational education cycles (training levels)

(a) Basic general vocational training

This training is given to grade four basic education completers, aged eleven to fourteen, for four months. The entry requirement is personal interest and physical fitness. Under the supervision of a skilled person, the trainee is expected to:

- Use local hand tools,
- Engage in group/team activities,
- Involve in problem solving activities within their capabilities.

The major courses given under this scheme are:

Agriculture
- gardening, fishery, poultry, etc.

Home Economics
- food preparation and preservation techniques
- clothing construction and embroidery
- home management
- health, childcare and development

Handicraft
- pottery, carpentry, weaving, etc.

The common courses will be market studies, human relationship, and salesmanship.

(b) Medium technical and vocational training

This training is given to grade eight completers, aged seventeen and above, for six months. The requirement for entry is personal interest and physical fitness.
On completion of the course, the trainee is expected to:

- Manipulate hand tools and simple machines,
- Develop manual dexterity,
- Work independently in small-scale production,
- Develop a positive attitude towards team work.

The major courses offered under this scheme are:

Agriculture
- nursery practices
- horticulture
- field-crop production
- crop protection
- forestry
- soil and water conservation
- bookkeeping
- poultry
- fishery
- cattle breeding, etc.

Home Economics
- food and nutrition
- bakery
- cookery
- textile and clothing construction
- reception
- embroidery
- home management and housekeeping
- childcare and development, etc.

Handicraft
- pottery
- blacksmithing
- horn craft
- basketry
- goldsmithing
- hide and skin craft

Construction
- building
- road construction
- bridge construction
- painting
- plumbing
- surveying
- electricity
- etc.

Industrial Mechanics
- general mechanics
- auto-mechanics
- electricity
- machine

Health Business
- health assistance
- bookkeeping
- dietary
- record keeping
- midwifery, etc.
- typing
- clerical, etc.

The common courses for this programme are bookkeeping, record keeping, and entrepreneurship.

(c) Skilled level vocational training

This training is given to grade ten completers, aged seventeen and above, for a year. The entry requirement is interest in physical fitness.

On completion of the course the trainees will:

- Develop entrepreneurship skill,
- Be able to use machinery and certain equipment,
- Be gainfully employed, self- or wage-employed,
- Be able to solve personal and community problems.

The major courses given under this scheme are:

Agriculture and Home Economics
- nursery practice
- food and nutrition
- horticulture
- cookery
- field-crop production
- bakery
- crop protection
- pastry
- natural resource conservation
- reception
- forestry
- home management and housekeeping
- soil conservation
- textile and clothing construction
- wild animal conservation
- health
- beekeeping
- childcare and development
- poultry

- hairdressing, etc.
- fishery
- livestock production
- animal food and feeding
- basic veterinary
- introduction to agro-economics

Construction and Health
- building
- road construction
- nutrition
- bridge construction
- dental care
- city surveying
- sanitation
- bricklaying
- laboratory technician, etc.
- painting
- electric and gas welding

Business Industrial Mechanics
- market surveying
- auto-mechanics
- salesmanship
- general mechanics
- bookkeeping
- machine operation
- management, etc.
- surveying
- drafting
- woodwork
- electricity

(5) Technical and vocational education and training

This is the last cycle of technical and vocational education at the secondary level. It is classified in the formal sector. The training is given to successful completers of grade ten, aged seventeen and above, for two years. High achievers of the one-year technical and vocational education beyond the formal sector are also admitted to this training. The entry requirement is personal interest and physical fitness.

After completing the two-year training, the trainees are expected to:

- Plan and establish their own organisation,
- Independently operate and maintain machines and equipment,
- Work as an assistant researcher,
- Develop their skill through further education.

Major courses related to common courses

Industrial tecHnology
- technical drawing
- technical English
- auto-mechanics
- workshop management
- applied physics
- drafting
- applied mechanics
- chemistry
- electricity
- maths

General Mechanics
- entrepreneurship
- machine technology
- surveying
- woodwork, etc.

Construction Technology
- bricklaying, painting and plastering
- joinery and carpentry
- electric and gas welding
- fitting and plumbing
- reinforcement assembly of concrete structures

Business
- accounting
- banking
- business English
- secretarial science
- economics
- commercial maths
- commercial law
- entrepreneurship
- economic geography
- computer programming
- cost-accounting

Home Economics
- food and nutrition
- applied biology
- technical English
- chemistry
- applied maths
- general statistics
- business economics
- home management and housekeeping
- art and design
- entrepreneurship
- basic bookkeeping
- textile and clothing
- technical drawing
- applied chemistry
- health
- childcare
- applied biology and development
- chemistry

Agriculture
- agro-mechanics
- technical drawing
- technical English
- plant science
- applied mechanics
- applied physics
- animal husbandry
- workshop management
- chemistry
- nature conservation and organisation
- biology
- agro-economics
- surveying
- maths
- economics
- entrepreneurship
- agricultural management

(6) Conclusions

Victimised and ravaged by man-made and natural disaster for the past many years, almost all regions of Ethiopia suffer from low per capita income, population explosion, unemployment and poor infrastructure development. The annual economic growth rate is still too small to absorb the labour force which has been increasing in the past due to an unchecked population growth.

The five-year economic policy, among other things, is designed to check this rampant unemployment among the young. The new economic policy is conducive to a market-based economy and the legal and regulatory framework encourages the establishment and mushrooming of private enterprise.

The New Education Policy which encourages the development of technical and vocational education beyond the formal sector is in tune with the envisaged infrastructure development of the country. For without the gainful self- or wage-employment of significant proportion of the economically active population, the envisaged infrastructure development becomes a dream that may never come true. Both are supplementary to each other, and the realisation of the economic development is dependent on the availability of a trained workforce.

Higher education institutes in Ethiopia have been given administration autonomy by a 1994 government decree. This means technical and vocational colleges have a great opportunity to play a leading role in the expansion of technical and vocational education beyond the formal sector.

The bulk of small-business employees got their skill training through crude forms of apprenticeship. The technical and vocational colleges can tailor customised training to upgrade the skill performance of such employees by charging tuition fees which may partly be covered by employers. As a result of newly-gained skill of their employees, small businesses may improve the quality of their services and products. With improved service and product quality, they will have the necessary edge over their competitors to profitably stay in business. By catering training to such employees, the technical colleges will also be able to siphon additional revenues that will make their programmes sustainable.

5.5 Brief Description of the Jua Kali Movement in KENYA

by Eng. G. K. N. MBUGUA

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(1) Philosophy

The Jua Kali movement in Kenya is quite old but can rightly trace its humble beginnings with the achievement of independence. Before independence the society was too controlled to have been able to express its creativity and independent spirit without being considered a nuisance. The Jua Kali movement is founded on the principle of service to the community at a profit.

(2) Definition of Jua Kali

The term "Jua Kali" means "hot sun" and has loosely been used to incorporate the whole informal sector. Its beginnings are however associated with those mechanics, welders, sheet-metal workers who toiled in the hot sun on land that was not theirs out of pleasure and also out of necessity to make a living. Within the Ministry of Research, Technical Training and Technology, the term Jua Kali has assumed an operational definition to mean "small-scale manufacturing and technology-based services". This definition is dictated more by limited resources than by choice.

(3) Recognition of the Jua Kali movement

The potential of the informal sector and the Jua Kali movement, not only as a vehicle for employment generation but also as a tool for wealth creation, was first recognised in the ILO Report of 1971. The Sessional Paper No. 1 of 1986 on Economic Management for Renewal further recognised this potential and in 1988 the Government created the Ministry of Technical Training and Technology with the "promotion of the Jua Kali Movement" being a section in the Department of Technical Training. In 1992, the Jua Kali division was elevated to a full department and renamed the Directorate of Applied Technology. This department has now built considerable expertise in their area.

(4) Achievements

The Jua Kali sheds

The first Jua Kali shed was established at Kamukunji in 1989 by His Excellency the President Daniel Toroitich Arap Moi. Although the site existed and was occupied by Jua Kalis, it was the President who, through his generosity, thought of providing them with a roof. Since that time, many more Jua Kali sheds have been built or are under construction.

1. The government has funded the construction of Nyayo sheds in 52 sites in 36 districts. Most of these sheds are occupied and in full use. This has cost about KSHS 100 million.
2. The government, in conjunction with the Federal Republic of Germany, has constructed 333 completely serviced and secure work places for Jua Kalis artisans at seven sites in five towns, namely: Nakuru, Voi, Karatina, Meru and Kisii. This has cost about KSHS 90 million.
3. The Government of Kenya, in conjunction with the Danish Government, has constructed 31 sheds in the Taita Taveta district. This has cost about KSHS 47 million.

4. The Kenya Government, in conjunction with the Belgium Government, is currently putting up sheds in five towns, namely: Kakamega, Thika, Kitale, Machakos and Migori. This will cost about KSHS 100 million.

Sector mobilisation

Currently there are about 300 registered Jua Kali Associations with a total workforce of about 20,000 registered Jua Kali artisans. Most of these associations are site-based. A further 200 Jua Kali Associations with a total workforce of about 15,000 Jua Kali artisans are awaiting registration. The Jua Kali movement is well spread out in Kenya geographically.

The Jua Kali movement is today identified by the government as embracing the best strategy in employment generation and poverty alleviation on account of its low capital requirements per job created.

(5) Challenges

Marketing and publicity

Goods only move if consumers are aware of them. To meet this challenge, the Ministry, in conjunction with BAT(K), has organised seven provincial Jua Kali exhibitions in an attempt to promote Jua Kali products. These exhibitions have been immensely successful, but a lot remains to be done. This year, Nairobi will host the Grand Finale Exhibition in September, and it is also our desire to invite other Jua Kali operators from our region. This is a worthwhile goal as the three economies integrate and become one market.

Availability of suitable Jua Kali sites and industrial plots

The Jua Kali sites are today considered as nurseries for entrepreneurs. The low barriers to entry on account of low capital requirements are considered a major attraction. As such, it is important that such sites be communally held. Those artisans or entrepreneurs who become more successful are expected to graduate from these nurseries and buy private land for their further development. The availability of suitable Jua Kali sites as well as suitable private industrial land is, therefore, critical in growth of the Jua Kali Movement and industrialisation of Kenya.

(6) The future

We are looking at the Jua Kali movement not only as a vehicle for employment generation and wealth creation, but also as an important vehicle in indigenous people being introduced to industrialisation as articulated in the current development plan and Sessional Paper No. 2 of 1996, on Industrialisation to the Year 2020.

5.6 Non-Government Organisations and Enterprise in LESOTHO by Mr Mota SEKONYELA

Mr Sekonyela is the Deputy Director (Administration) of the Lerotholi Polytechnic, in Maseru, Lesotho.

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(1) Introduction

The transformation that has enveloped the whole of the African Continent is a reality that requires critical if not hard choices to meet urgent political, social and cultural needs. In a word, the African Continent is confronted by the dilemmas of change, not only for betterment of the lives of its people, but also, most importantly, for ensuring human survival, even under the harshest conditions.

In our desperate efforts to understand what is going on in our Continent, education is being looked at to provide answers to some of the glimpses into the future direction for life-saving measures. It is in this connection that I wish to place the relevance of technical and vocational education. Evidence from several studies and experiences of most developed countries in the world is being used as indicators of the options available to each developing country. For example, the 1995 sitting of UNESCO has this observation:

> "Development must have a human face. Sustainable social development requires a radically reoriented programme of human resources development, not in the narrow managerial sense, but in a broader sense of improvement in the quality of life. Better education, better health, respect for human rights, democracy, rational use of resources through the application of recent advances in science and technology, as well as a commitment to the culture of peace and international solidarity." (UNESCO, 1995, p. 3)

Two years earlier, another August gathering in Angers, France, made a sharp criticism of Sub-Saharan Africa performance in the implementation of education sector programmes. In their own words, they observed:

> "Despite continuing high demand for education and major investment in this sector, the region's education systems are not producing the intellectual and human resources needed for sustained economic growth and political stability." (DAE, 1993)

Perhaps I must now turn to the issue which I intend to examine in detail: the contribution of the non-governmental organisations and enterprises. I further wish to use Lesotho as a case-study and discuss the role of Basotho Enterprise Development Corporation (BEDCO) and Lesotho National Development Corporation (LNDC) in non-formal technical and vocational education activities. Lastly, I would also want to comment on the contribution of the Lesotho Highlands Water Project (LHWP) in the non-formal sector as well as the Thaba-Khupa Ecumenical Centre.

(2) Basotho Enterprise Development Corporation

The Basotho Enterprise Development Corporation was established by the Government of Lesotho in 1975 as a subsidiary of the Lesotho National Development Corporation. At the time, its mandate was to provide loans, business counselling, training extension services, and developed land and premises on rent to small-scale business enterprises. It also ran service workshops as part of its programme of assisting small-scale manufacturers.

As recently as 1990, BEDCO has become a parastatal organisation under the Ministry of Trade and Industry whose mandate is mainly to promote Basotho-owned and managed small-scale enterprises.

To the extent that BEDCO's mandate has a direct bearing on non-formal activities of the small-scale entrepreneurs, we have to understand the characteristics of this sector in Lesotho. The most common and easily observable characteristics are the following:

- Lack of confidence to face the competitive practice of the world of work,
- Lack of adequate funding to purchase the required machinery and other inputs,
- Inability to attract well-trained workers to ensure quality products that can favourably compete in the market, and
- Lack of preparedness to train for improved productivity and enhanced performance.

The majority of people who are found in the non-formal or informal sectors do not possess the required business skills to run business on their own, let alone adequate training in the fields of their choice. The reasons are not hard to arrive at, for, in the main, they are either rejects of the country's educational system, drop-outs from the system, or those people who at most possess only the crudest basic skills which would require further refining.

The loans provided to individual small-scale entrepreneurs are so small that they partly address some of the total requirements of their businesses, but not all. Of course, funds made available to BEDCO for this activity are very inadequate. Still further, most of the small-scale entrepreneurs do not have enough security to enable them to qualify for bigger loans should they wish to apply for these loans themselves directly from the financial institutions.

Finally, having realised that the mandate was too broad, and that there was little success in carrying it out, BEDCO has down-sized its operation and now concentrates on assisting the small-scale entrepreneurs in the preparation of technical appropriation by the financial institutions and only acts as a guarantor. It still continues with its training extension services but only on a small scale.

First, I would like to centre my argument on the understanding that meaningful development is a function of, among other things, well-trained human resources possessing relevant skills and attitudes. The two are important elements towards procuring and sustaining gainful employment. The Public Sector in Lesotho has overstretched the financial muscle of the government to its limit, to the extent that private sector assistance is unarguably inadequate. To this end, it is imperative for Lesotho Government to engage in serious negotiations with non-government organisations to step up their financial inputs in the non-formal activities. In the same vein, the government should reorient its finances to give greater assistance to the non-formal TVET activities.

Secondly, non-government enterprises must be made to understand that success in the private sector depends to a large extent on continuous training of the workers. In most cases, this important aspect has deliberately been avoided by most enterprises for the obvious reasons of it being very costly. Formal institutions can only provide initial training in skills acquisition. Skills development for enhanced performance and improved productivity should be understood to be a shared responsibility of the employing organisation and government. It can only be in cases where employees need training in other skills, which may not be directly related to the jobs they are doing, that they can be sent back to the formal institutions. Otherwise, the type of assistance the formal TVET institutions have to render to the non-government informal sector should be supervision. In this regard, the JASPA Employment Advisory Mission observed as far back as 1979 that:

> "The supply of technicians as well as of craftsmen and artisans should be augmented through "on-the-job" and "in-service training", a move that should involve both government departments and other private sector establishments which are large enough to sustain it." (JASPA, 1979, p. 216).

(3) The Lesotho National Development Corporation

The LNDC is the Government of Lesotho's main parastatal agency for implementing the country's industrial development policy. The corporation was established in 1967, and charged with the responsibility "to initiate, promote and facilitate the development of manufacturing and processing industries, mining and commerce in a manner calculated to raise the level of income and employment in Lesotho." (Lesotho 1996, p. III).

In carrying out its mandate, LNDC focused on the promotion of export-oriented and labour-intensive projects with a view to reducing the chronic trade imbalance and also to facilitate the much needed job opportunities in the country. In its search for potential investors in the country, LNDC has, for a long time, used low wage rates as Lesotho's main attraction.

It has, however, dawned on them that their success has largely been in the manufacturing projects, especially from companies in textiles, garments and electronics. There is now a need to complement this effort by promotion of industrial linkages and upgrading of domestic technological capabilities in order to ensure that industries become permanently rooted in the country.

A number of observations are worth noting relating to the foreign companies which have invested in Lesotho. These are the following: their reluctance to undertake training of local employees, their payment of minimum wages based on the minimum wage structure suggested by the Government of Lesotho, their cunning practice of importing skilled labourers from their home countries even when skilled local labourers are available, and their reluctance to engage local counterparts in top supervisory positions. These practices do not auger well for the promotion of non-formal TVET activities in the country. Granted, a lot of unskilled people have managed to get temporary employment from most of these companies with no development of their skills for future gainful employment. On the other hand, semi-skilled workers have suffered because of low pay packages.

Unlike the Basotho Enterprise Development Corporation which undertakes training even though on a very small scale, LNDC does not have a training wing. All it does is to encourage the formal training institutions to go out of their set curricula by offering tuition to their unskilled and untrained labourers in various projects which are not directly related to the long term human resources needs of the century. For example, one company which needs to make an investment, through establishing a firm for assembling money safes, might require an institution to train its students not only for the firm's employees in that particular skill. When such a firm closes down, such a course also has to be discontinued. Such moves have not always met with sympathetic considerations by formal training institutions which by all means should focus on the long-term human resources needs of the country as a whole.

(4) Comments on the Lesotho Highlands Water Project

The Lesotho Highlands Water Project (LHWP) has effectively operated since 1990 as a joint partnership between the Governments of Lesotho and South Africa to transfer water (Lesotho's White Gold) from Lesotho through underground tunnels to South Africa. The agreement, signed in 1986, stipulates the sale of this water to South Africa and, secondly, helps Lesotho to generate its own electricity through the surplus water in order to reduce dependency on South Africa. This giant project attracted a lot of donor funding since the two countries could not carry it out on their own.

Within the context of this Seminar, I wish to comment on the project's contribution to non-formal TVET activities in so far as they are applicable.

First, LHWP was compelled to recruit labourers from the project site areas as much as would visibly be possible. The understanding was to compensate for the losses that would be incurred by the people who would find themselves relocated elsewhere.

Secondly, the government of Lesotho has emphasised that associated works on the construction sites should, as much as possible, be labour-intensive in order to generate the much needed job opportunities for the Basotho.

Thirdly, the problem of massive retrenchments of mine workers from the Republic of South African gold mines, orchestrated by the falling prices of gold in the world markets, was to be partly addressed by the execution of this project.

Lesotho Highlands Water Project established a training centre of its own where the unskilled labourers were provided with basic required skills. The retrenched mine workers were also retained and assisted in the construction of the underground tunnels. The project has provided employment to more than 2,000 people for periods ranging from one to six years. During this time, causal employment has also been provided to the majority of the rural communities around this area. The project has, however, started to lay off most of these trained people after the completion of phase 1, which mainly involved the construction of the main reservoir (Katse Dam) and the transfer tunnel to South Africa.

(5) The Thaba-Khupa Ecumenical Centre

This Centre is a joint venture of the three main churches in Lesotho: i.e. the Anglican Church of Lesotho, the Lesotho Evangelical Church and the Roman Catholic Church and is operated by the Christian Council of Lesotho. Its main source of funding comes from the contributions of these three main churches. It provides tuition in the areas of home economics, poultry keeping, vegetable production, brick-paving, as well as textile fabrication. The duration of the programmes range from nine months to twenty-four months. Entrants to these programmes are drop-outs from primary school and junior secondary schools.

At the centre, students are taught basic skills which will enable them to start projects of their own upon completion of their studies. The overall purpose of the centre is to provide them with self-employment skills. A lot of our youth have benefited tremendously from the training offered here since a majority of them have become part of the non-formal sector in Lesotho.

Unfortunately, upon graduation, the students are not given anything that will help them to start their own business. They are expected to go and negotiate loans with the financial institutions without any form of security except their certificates. Some of them have even dared to compete for employment in the public sector which is already over-burdened.

(6) Co-ordination of non-formal TVET activities

The Lesotho Council of Non-Governmental Organisation (LCN) continues to play an important role of co-ordinating the activities of various non-formal TVET activities. It has established, through funding from donor organisations, a directory of most of these organisations, some of which were not known in the country. This is a very demanding job which requires massive financial support and qualified human resources. LCN was formed in 1990 and, to date, has only seven paid-staff members. There is only one staff member who undertakes the training of the various committee members of these several organisations. The training offered is indeed very basic and is aimed only at skills relating to running any organisation. It is not work-related skills development training. To this end, the important role played by LCN will be limited only to co-ordination within the context of this paper.

(7) Future policy considerations on TVET activities in Lesotho

With references to export-oriented sectors such as manufacturing textiles and garments, a strategy must be developed to make training of local human resources a compulsory clause in the investment contract agreement. This strategy would help in building capacity for sustenance of such firms when the investors finally pull out.

In most instances, foreign investors and entrepreneurs have deliberately avoided using the locally available skilled or semi-skilled labour forces, and have resorted to unscrupulous practices of either importing labour from their home countries or elsewhere in the region where it is cheaply available. It might be an appropriate time to put in place sound policies that will compel these foreign entrepreneurs to use the skilled labour locally available to the maximum possible extent.

Lesotho should consider, as a matter of urgency, formulation and implementation of a training levy or a skills development fund as it is done in other countries. The costs of technical and vocational education and training are too immense to be borne by government alone.

Non-government organisations and enterprises require the assistance of technical and vocational institutions as much as do the institutions themselves. It might be prudent to formulate an open-door policy regarding the sharing of training institutions to know more about what is going on in industry. In this regard, it is very pertinent to suggest that what must start in the minds of men must be permeated by peace.

5.7 The National Policy Definition in MALAWI

by Mrs Joyce PHEKANI and Mr Maston M. MTAMBO

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(1) Provision of the informal TVET

Malawi is aware that it can only absorb a very tiny fraction of those who come to the labour market because of the relatively small size of the wage economy and the rapid growth in the number of the labour force entrants. This imbalance has existed for a long time now, and that is why the Government of Malawi (GOM) encourages informal training for self-employment and rural development. Salima Rural Trade School and Phwezi Rural Polytechnic are some institutions that provide informal TVET for self-employment and rural development. Training is provided in bricklaying, carpentry/joinery and metalwork, lasting for two years. Successful students receive a loan in the form of a toolkit.

Although agriculture is the main activity for more than three-quarters of Malawi's rural population, informal TVET graduates also engage in non-farm activities to supplement household income or community development. Activities include tinsmithing, furniture making, producing of utensils, ox-cars, farm equipment, etc.

From tracer studies conducted on the 1992/1993 graduates from Salima Rural Trade School, 41% of the graduates are self-employed, 32% are wage employed, and 27% are inactive: i.e. they are either doing nothing or their whereabouts are not known. From Phwezi Rural Polytechnic, 36% are self-employed, 28% are wage employed, and 36% are inactive.

The tracer studies identified a number of bottlenecks. These include limited market due to seasonal incomes from agricultural produce. The equipment that is used in these training centres is not available in the rural communities, so that the graduates have to find their own equipment which has got a short lifespan. This contributes to poor quality of goods and services. High losses are therefore incurred. Another major problem is the poor, or indeed, lack of a proper transport network.

Due to the absence of pre-training-needs analyses and post-training tracer studies, detailed assessment about the effectiveness of certain training offers is problematic. However, we feel safe to say that, to date, non-formal training in Malawi is rather fragmented in its spread and quite narrow in the fields being offered. Without donor support, non-formal training would virtually not exist. NGO-run courses represent a significant share of skills training for disadvantaged target groups. Recent programmes have assisted greatly in enhancing female participation. Not withstanding these gains, enrolment patterns continue to reflect traditional male domains (men: technical areas, women: home economic areas). In the short term, this suggests the need to expand programmes that traditionally attract women; in the medium term, equitable access and enrolment across more technical fields should be promoted.

(2) Problems and possible solutions relating to non-formal TVET

Problem 1

The inadequacy and irrelevance, or indeed, the absence of any Training Policy on Non-formal TVET and the implications for initiating and implementing such a policy at a national level.

Possible solution

The objective should be pursued to ensure that a policy which addresses appropriate non-formal and formal TVET be developed. Operational steps could include the following:

1. To identify areas and aspects that will need to be included in the TVET policy.
2. To identify all institutions and organisations who should be involved in the TVET policy planning.
3. Identify strategic measures for successful policy implementation.

Some areas and aspects to be included in the TVET policy should be the:

- Definition of TVET,
- Relevant curricula,
- Certification procedures,
- Training courses,
- Target groups,
- Duration,
- Gender,
- Linkage to credit institutions, etc.

Problem 2

Lack of sustainability of training programmes due to poor mobilisation and utilisation of resources. The poor utilisation and ad hoc implementation of training programmes could be due to the inappropriateness of some training programmes, the lack of training needs analyses, and the lack of review and follow-up in programmes.

The major cause for this problem is partly due to the high dependence on government and donor resources, and partly due to the lack of qualified human resources. The ensuing problems after the donors have handed over include inadequacy of financial resources, lack of clear vision of their own mandates, and poor co-ordination and co-operation.

Solution

The seminar workshop to provide possible solutions.

Problem 3

Weak relationships between government, private sector, NGOs, entrepreneurs and workers. That is to say, non-formal training in Malawi is rather fragmented. There are no unified standards, no national checks among the various training providers: nothing.

Possible solution

To establish realistic co-operation and co-ordination mechanisms amongst all training providers, a co-ordinating body is required. Better co-ordination is an important contribution to achieving all non-formal training objectives. Of course, there are several questions to answer in this regard such as:

- What is to be co-ordinated?
- By whom?
- How?

The operational steps to follow in forming such a body would include:

1. Identifying needs for co-operation and co-ordination and outline respective areas.
2. Identifying roles and responsibilities of the individual institutions and training providers,
3. Designing appropriate mechanisms for the structure of this body.

(3) Financing the informal and non-formal TVET

Financing the Informal and Non-formal Vocational Education and Training in Malawi is divided into two different ways: financing institutions is one, and financing the trainees is the other. Although both ways are being practised, it is difficult at this time to specifically state the magnitude of each. Below is a summary of how each is financed:

Financing institutions that provide non-formal TVET

1 Allocation from government

This is perhaps the largest financing source through its various organisations which include DEMAT, SEDOM, MEDI, Salima Rural Trade Schools, Nasawa Technical Training Centre, MOWCACDSW, and MACOHA. These organisations belong to line Ministries where, when outlining their training costs, a selection of the most optimum option is made.

2 Fees from trainees

Trainees pay fees for tuition, boarding and other forms to master crafts persons, training providers for profit, and several other NGOs.

3 Commercial activities

Most non-formal institutions, especially those that belong to NGOs, offer their facilities for hire to other organisations as one way of generating their supplementary income. These facilities include seminar halls, workshops for production, and other activities.

4 Donations

Several non-formal TVET institutions receive donations from various organisations, local and foreign. These donations are in the form of equipment, training materials, personnel or even cash.

Financing trainees

1 Grants from families

Most trainees pursuing non-formal TVET get much of the support from their own families. This is in fact the oldest system in Malawi.

2 Sponsorship

Other trainees get their sponsorship from their churches, employers NGOs, from other people, etc.

3 Loans

Some trainees cannot solicit any free help from anywhere. They therefore borrow money from at least somewhere and pay it back at some latter date.

4 Subsidies

Most trainees, especially in more organised non-formal TVET institutions are also financed by way of subsidies through the provision of food, accommodation, transport, recreation, and through other means. This is very common in church organisations.

Other sources

Other means of financing the informal and non-formal TVET in Malawi come in as funded projects, such as those from SADC, or as external sponsorship from GTZ, DANIDA, the British Council, USAID, etc. The point to emphasise here, however, is the fact that the volume of informal and non-informal TVET in Malawi is so vast that only very little of it is explored. To effectively fund/finance the whole of it is beyond the imagination of some of us. It should be pointed out here that formal TVET in Malawi, through the National Apprenticeship Training Scheme, is funded through the levy/grant system, just as is the case with most other countries.

(4) Government intervention in stimulating informal and non-formal TVET

Government intervention in stimulating the informal and non-formal TVET in Malawi is carried out through various programmes, but the major one is known as the 5th Country programme. The programme management by the Malawi Government as a National Execution Programme operates through the Small Enterprise Development Programme (SEDP), and is run under the auspices of the Ministry of Commerce and Industry. The SEDP is aimed at creating alternative off-farm income opportunities, and is mainly divided into five components:

1. Policy, Promotion and Co-ordination. The purpose of this component is to create a more enabling environment for micro and small enterprises. This is based at the Ministry of Commerce and Industry Headquarters that has the responsibility of formulating policies for the sector, establishing a data base on the sector, and creating and servicing centres in the Local Impact Areas.

2. Entrepreneurship Development and Skills Training. The objective of this component is to strengthen the business and technical skills of entrepreneurs in order to enable them to run their businesses successfully. This component is based at the Development of Malawian Enterprise trust (DEMAT).
3. Credit. The objective is to improve access of the target beneficiaries to credit by establishing an appropriate credit delivery system. Under the component, a Micro and Small Enterprise Credit Guarantee Fund has been established at the Commercial Bank of Malawi using funds from the United Nations Capital Development Fund (UNCDF). The loans under this Guarantee Fund are given to groups. This component is also based at DEMAT.
4. Appropriate Technology. This is one of the cross-programme strategies and its objective is to improve access of micro and small enterprises to appropriate and low cost technologies. This component is based at the Malawi Industrial Research and Technology Development Centre (MIRTDC).
5. Marketing. The objective of this component is to increase market opportunities for goods and services from the micro and small enterprise sector, and strengthen the capacity of marketing groups of micro and small enterprises. This component is again based at DEMAT.

Appropriate technology, marketing, etc. are very essential to the informal sector.

The evaluation of the programme has shown some failures but, of course, accompanied with some success.

The major elements of successful interventions in this sector may be summarised as follows:

1. Interventions have been addressing specific needs and problems of target groups.
2. Intended beneficiaries at all stages have been playing substantial participatory roles.
3. Attention has been given to complementary inputs to the beneficiaries.
4. Implementing staff have been trained to deliver sound management, commitment and competence.
5. Frequent follow-up services have not been ignored.

One other major organisation that has played a big role in the intervention is the Malawi Industrial Research and Technology Development Centre (MIRTDC) which identified affordable tools and easy to use equipment in:

- tinsmithing
- blacksmithing
- carpentry
- bricklaying
- shoemaking
- curios carving
- knitting
- beekeeping
- beer brewing
- fishing

Production technologies of:

- sugar
- soda/salad
- cement tiles
- tanning
- soap
- candles
- bricks

Fuel effective:

- cooking
- bakery ovens
- brick burners

Food processing and preservation:

- fishsmoking techniques
- storage facilities
- milk processing
- canning
- cooling

Machinery:

- hand carts
- ox carts
- bicycle trailers
- maize shelters
- rice threshers
- potters wheels
- floor mills
- oil presses
- water pumps
- ploughs

Appropriate technology demands were formulated in combining with skill upgrading demands in:

- pottery
- curios production
- boat-building
- dyeing
- blacksmithing
- building
- brick moulding
- leather crafts

But still more, the major question has been **who** should receive the intervention and **why**, knowing very well that the informal and non-formal sector is very vast. Micro-entrepreneurs, school drop-outs, women traders, progressive artisans, TVET graduates from formal institutions who cannot get employed in industry, etc.

(5) Conclusions and recommendations

From experiences from the labour offices and school enrolment figures, it seems that the dominating features of current labour market trends in Malawi are limited employment opportunities in the formal sector, a growing need to find (self) employment in the formal sector, the important role of agriculture as regards labour absorption, an extreme gender imbalance in employment opportunities, and an increasingly dramatic rate of youth unemployment.

In the policy documents reviewed a consistent pattern emerges. Although the government has, as a policy, accepted vocational training as one of the tools for promoting economic growth and poverty alleviation, there is a tendency to give it a minor role as compared to other factors influencing development. Thus, there are no clear guidelines on how the vocational training system should be functioning in order to equip people with the knowledge and skills required to meet labour market demands.

At implementation level, this has led to a nearly total neglect of certain levels of human resources development. The labour market trends are not at all reflected in the existing national vocational training scheme. The system exclusively prepares for later wage employment in the formal sector. This fact cannot be changed merely by the injection of entrepreneurship training into technical schools. The fact remains that students in these institutes have gone through a school career that has not prepared them for the practical work of an independent trades person, and neither has their social environment. Their parents have invested a lot of sweat and pride in giving their children a better and costly education and, in return, they expect a rewarding job afterwards.

Even the placement in industry does not offer the experience needed for later efficiency in self-employment. Here the trainees follow clear instructions and use materials and equipment which are not available in the small enterprises of the informal sector. Thus, they are missing two important prerequisites for later self-employment: a behaviour pattern of independent and self-efficient action, and the practical skills to produce or repair articles from scratch.

Nonetheless, graduates from formal training institutions are already in a position where they may not find formal employment and will be forced to change their assumed career pattern. The system must devise ways of supporting this process in order not to waste the high investment in human resources development already made by this group. Thus, the curriculum would need a much more profound revision than merely incorporating the teaching of entrepreneurial skills, which again are taught outside the real and highly competitive market environment prevailing in Malawi.

The current training system has no policy geared towards the vast majority of primary school-leavers. The situation should be considered as crucial with regards to the fact that about 80,000 pupils are receiving the primary School Leaving Certificate annually, and only about 10% out of these can enter secondary education. Training responsibilities towards this group are passed on to parents, small enterprises, and NGOs without even the slightest supportive interventions. On the contrary, the government does not seem to be aware that its own institutions initially designed to train people from that level have more or less ceased to do so (e.g. MEDI). Neither do they pay due respect to the NGO initiatives, and are ignorant of their problems, and thus of the problems in a region where such initiatives may have played an important role (e.g. Nazarene).

Again, a strategy is needed to develop and sustain non-formal training activities. Just as with the private sector, this would include intensive dialogue, defined roles and responsibilities, co-ordination of activities, and the government accepting a role as facilitator of this process.

Although micro and small enterprises are important and, by far, the largest mediator of skill transference, they will, if left alone with this task, not be able to raise the standard of performance required to meet consumer demands. Thus, consumers will continue to prefer imported products.

The productive sector in Malawi has a very small tradition and was restricted in its development due to former government policies. New policies try to foster micro and small-scale development without paying enough attention to the training needs of these enterprises. Thus, the existent apprenticeship practice should be built upon and advanced in conjunction with in-service training and upgrading of master craftspersons.

The large number of illiterates and semi-illiterates is another group that needs to be integrated into a national training strategy. Functional literacy, that is basic education combining with occupation-effective skills is the key intervention on this level. Again, there are already a lot of NGOs activities in this subsector. Skills training though is not easily translated into self-employment due to weak linkages with markets, business training, credits and follow-up services. In addition, the lack of capacity as regards administrative as well as technical skills and poor co-ordination with other organisations and institutions may easily stand in the way of training success.

The major constraints of working on any of these above levels of skill transference is the lack of qualified teachers/instructors. Only the MOWCACDSW has tried to instil in their community workers the practical skills pertaining to the needs of their specific target groups. Therefore, special efforts will be needed to build the capacity of trainers/instructors to fulfil the practical requirements of vocational skills training as well as to identify people with appropriate competencies in industry. More female instructors would need to be trained and/or upgraded, and employed to specifically motivate women to enter the technical training field.

A coherent national strategy can provide a framework for micro-level interventions. The micro level comprises individual target groups, communities and regions where the specific skill demands and realistic labour-market opportunities will need to be analysed.

At this level, many activities pertaining to small-enterprise promotion and skills training are already taking place. The analysis of the failures of precisely some of these reflect the lack of coherent guidelines. The lack of co-ordination in this field leads to duplication of some tasks, while others fall under the table. One example of this is the proliferation of entrepreneurship training and small-scale loans schemes, while skill training has been neglected. Precise tracer studies are vital, however, in order to study this phenomenon in greater detail. In many fields, no effective needs analyses have been conducted; as a result of which, the loan and entrepreneur development programmes have not had the hoped-for success. Without studies of this sort to examine impact at micro level, the policy level cannot have the feedback it needs to correct measures in good time.

If Malawi genuinely intends developing a training policy, the process of development itself would be the first step in the road to capacity building. The current situation is reflected in the existence of several institutions which presuppose co-ordination and co-operation among providers of training which, however, do not take place. This is because the concept of ownership has not yet been truly accepted. A great many good ideas and proposals already exist but have not been acted upon.

5.8 Beyond the Formal Sector in MAURITIUS

by Dr Feroze COOWAR

Dr Coowar is Assistant Director – Training within the Industrial & Vocational Training Board (IVTB) in Mauritius.

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(1) Summary

An insight into the organisation and regulation of technical and vocational training in Mauritius is given. The non-formal sector of the economy is appraised and some issues relating to technical and vocational training in that sector are identified. Measures taken to make formal training attractive to individuals and enterprises are then discussed.

(2) Introduction

The IVTB is the lead organisation in the business of technical and vocational training. It employs about 472 people and operates 18 technical and vocational training centres. The IVTB falls under the aegis of the Ministry of Education, Human Resource Development and Employment. Since 1989, when it became operational, the IVTB has played a key role in providing technical and vocational training to young people. To date, about 95000 people have received training: some directly in IVTB-operated training centres and others in private training centres regulated by the IVTB.

The role of the IVTB as provider and facilitator of technical and vocational training has been instrumental in building a skilled workforce. The setting up of suitable facilities, organisation of the training programmes, and the mechanisms put in place to make training attractive to individuals as well as to enterprises are important ingredients in this capacity-building process. In Mauritius, as in many other developing countries, where people engaged in the non-formal sector of the economy constitute a considerable proportion of the workforce, it is important that technical and vocational training be made accessible to them.

In this paper, an overview of the organisation of technical and vocational training is presented and the mechanisms implemented by the IVTB to render training available to people in the formal sector of the economy and beyond are discussed.

(3) Overview of the organisation of technical and vocational education and training

The organisation and regulation of technical and vocational training is the responsibility of the IVTB which is a parastatal body. It was established by Act of Parliament in 1988 and became operational in 1989. One of its main objectives is to provide for, promote, assist and regulate the training or apprenticeship of persons who are or will be employed in commercial, technical and vocational fields.

The IVTB operates 18 technical and vocational training centres. Over 30 full-time and numerous part-time courses are offered in a range of areas, including Automotive Mechanics, Electrical Installation Works, Hydraulics and Pneumatics, Jewellery, Hotel and Tourism, Precision Engineering, and Refrigeration and Air Conditioning. New courses in Automation, Art and Design, and Maintenance of Industrial Machines will start next year. It is a policy of the IVTB not to conduct training in fields that are provided by the private sector.

Courses offered in the IVTB training centres are certified under the National Trade Certificate (NTC) System, which distinguishes 3 levels of trade qualifications. The lowest level is the NTC3 which is a basic skill level aimed at providing individuals with useful but limited occupational skills and experience. Holders of this level of certification would most probably need to work under supervision. Courses leading to this qualification last one year on a full-time basis. The entry qualifications are:

a) at least 9 years (6+3) of schooling, and
b) at least 15 years old.

The level 2 certification (NTC2) is a standard skill level which provides individuals with a wide range of skills and experience and with occupational competence over a range of routine and non-routine tasks, making these individuals almost independent of supervision. Courses at that level may last 1 year or 2 years, depending on the structure and type of course. The entry qualification is either holder of NTC3 qualification in a relevant subject area, or holder of a School Certificate/GCE 'O' Level.

The highest certified level is NTC1 which provides individuals with an advanced level of individual skill and experience, involving design, planning and problem-solving ability, and with significant personal accountability. Courses at that level last 2 years and the entry qualifications are either holder of NTC2 qualification in a relevant subject area or holder of Higher School Certificate/GCE 'A' Level.

The IVTB is the regulatory body for technical and vocational training in the country. Private training centres are allowed to operate only if they are registered with the IVTB. Registration is based on criteria pertaining to facilities, trainers and courses being satisfied. Quality assurance is reinforced through continual monitoring of the training programmes conducted in these institutions. There are about 90 private training centres currently providing training in fields such as Information Technology, Office Skills, Management, Engineering, and others.

Since 1989, the IVTB has provided training to about 18,000 trainees in full-time training programmes and another 4,000 in part-time ones in its training centres. It has also promoted training through the Levy/Grant System (see section 5 below) and assisted towards the training of an additional 75,000 persons in the country.

(4) The non-formal sector of the economy

In the developing world, activities in the non-formal sector of the economy are commonly characterised by small units of production owned and operated by one or a few individuals with little capital. They often rely on ill-equipped facilities and a low level of technology. Use of labour-intensive techniques of production is a trade mark of these activities, resulting in low quality but relatively cheap goods and services. Because of its inherent inefficient means of production, the contribution of the non-formal sector to the Gross Domestic Product of a developing country is estimated to be quite low. Figures of around 10% are not uncommon.

In Mauritius, enterprises are classified as large enterprises and "other than large" enterprises. The latter are defined as those enterprises employing 9 or less employees. Although not all the "other than large" enterprises are necessarily in the non-formal sector of the economy, they are assumed so for the sake of the following analysis. In 1996, 37% of the total workforce were engaged in the non-formal sector. This represents about 173,000 people, scattered mainly in the following areas:

a) agriculture and fishing,
b) manufacturing,
c) construction,
d) wholesale and retail trade, and
e) community, social and personal services.

Despite the low contribution of the non-formal sector to the national wealth, a significant number of employees are nevertheless involved in a plethora of activities that require a range of skills. These are generally acquired through a loose system of apprenticeship, whereby the trainee, with virtually no initial skills and little formal education, learns the trade from a more experienced person through exposure to practical situations. This experienced person has, more likely than not, learnt the trade in the same way. The trainee is not systematically able to acquire knowledge, as he/she generally has a low education level, and theory lessons cannot be, or are just not, conducted to enhance his/her knowledge. The services provided or the products made in the non-formal sector being limited in quality, scope and complexity, the skills required and developed are also limited. Consequently, the prospects for career enhancement become frustrating.

A major issue is how can employees in the non-formal sector be provided with structured technical and vocational training. The IVTB, as the lead training organisation in the country, has implemented several measures to make formal training attractive to individuals as well as to enterprises. Such measures include extremely low fees for basic level courses, a Training Levy/Grant system, a Training Voucher System and the National Apprenticeship Scheme. In addition, close collaboration with industry allows a number of specialised short training courses to be mounted in the workplace and in IVTB training centres. Some of these measures are discussed below.

(5) The Training Levy/Grant System

In 1989, regulations for a Training Levy System were introduced. Under that system, an employer in the private sector pays a levy of 1% of its annual basic wage bill to the IVTB through the National Pensions Fund. These contributions are used to part-fund the cost of training provided by the IVTB. During the financial year 1995/96, over 11,000 employers made such contributions. These represented about a quarter of the total annual budget of the IVTB for that year.

A Training Grant System has also been operational since 1989. Under this system, private employers who have contributed to the Training Levy System are encouraged to invest in the training and retraining of their employees. Subject to certain criteria being satisfied, these employers will be reimbursed up to 75% of the cost of training. In addition, the IVTB would also part-fund the cost of air fares for IVTB-approved training obtained overseas by employees of such employers.

Recently, a Training Voucher System was introduced to encourage the training and retraining of employees involved in small and medium-sized enterprises. To qualify for Training Vouchers, these enterprises must have contributed less than the equivalent of US$ 500 towards the levy system in any one year. These enterprises are issued each year with Training Vouchers, each worth the equivalent of US$ 50 and valid for one year, for use as direct payment for training obtained from any IVTB-registered private training institution providing IVTB-approved courses.

(6) The national apprenticeship scheme

Non-formal technical and vocational training is generally not rigidly structured and has the advantage of being a flexible form of training. In the non-formal apprenticeship arrangement, trainees may learn the trade and acquire the necessary skills at the their own pace as there is rarely a time limit placed on the duration of the training. A major consequence of this situation is that such trainees are often subject to exploitation in their conditions of service. It may not be uncommon for an employer in this sector to unnecessarily extend the period of formation at derisory rates of pay, if any, so as to extract the maximum benefit from the trainees. Furthermore, a non-qualified or not fully-qualified trainee will be less demanding than one who is qualified.

Prolonging the duration of training unnecessarily hinders the trainee from making a more significant contribution to the national economy. It is therefore essential to formalise the training process.

In October 1994, a National Apprenticeship Scheme (NAS) was implemented by the IVTB. A national committee known as the National Apprenticeship Committee is responsible for formulating and overseeing policies and administration of the Scheme. Representatives of the Public and Private sectors and the Trade Unions form the membership of the Committee, which is chaired by the Director of the IVTB. The day-to-day running of the Scheme is managed by the Industry-Based Training Division of the IVTB.

The NAS is a partnership among the employer, apprentice and the IVTB. The employer and the apprentice enter into a "contract" which is registered with the IVTB. The NAS is a dual training system which combines on-the-job training with centre-based learning. The apprentice spends a minimum of one day a week attending theory classes at an IVTB training centre and a minimum of four days a week on-the-job training under the supervision of a "master" tradesperson at the place of work. Any person who has completed the equivalent of Grade 9 (6 + 3) and is 15 years old or over is eligible to join the Scheme. The apprenticeship lasts three years. The apprentice is required to take examinations in theory and practical work at regular intervals. If successful, he/she is awarded a National Trade Certificate-Level 3. The NAS currently involves apprentices in 15 trades, including such popular ones as Electrician, Cabinet Maker and Motor Vehicle Mechanic.

A major advantage of such a form of training is that it is structured and the apprentice is able to earn a living, albeit a slim one, as he/she learns. The Scheme has now been in operation for two years. Whilst it is popular among the young school-leavers, employers, in general, have not been forthcoming in providing the places. The IVTB maintains a directory of potential apprentices and assists vigorously in placing these apprentices in industry. However, for every five applicants for apprenticeship, only one finds a place in industry. The IVTB is presently reviewing the Scheme to make it more attractive to employers as well as to apprentices.

(7) The IVTB-Industry links

The economic success of many newly-industrialised countries has been based on many factors, one of the main ones being the quality, both in breadth and in depth, of the trained workforce. The role of industry in establishing the training strategies to be adopted is crucial. At the IVTB, the Industry-Based Training Division has been active in seeking and obtaining the collaboration of industry in many training projects. This collaboration revolves around the provision of part-time courses, organised in partnership with industry. These courses take three forms:

a) training at the workplace, using the company's facilities, when professional consultants/course leaders are provided by the IVTB; the whole activities being co-ordinated by the IVTB;
b) training of industry tradespersons in IVTB training centres, when the resource persons are provided by industry which also foot the bill; and
c) training of industry tradespersons at the IVTB training centres by resource persons provided by the IVTB.

(8) A continuing challenge

The education system consists of 6 years of primary schooling followed by 5 years of secondary schooling leading to the School Certificate/GCE 'O' Level and another 2 years leading to the Higher School Certificate/GCE 'A' Level. After the first 6 years of schooling pupils obtain the Certificate of Primary Education (CPE) if successful. The number of pupils failing the CPE examinations has decreased over the past 5 years. However, there are still an estimated 9,000 pupils who do not or cannot enrol into the secondary school system each year. Of these, about 1,000 engage in a 3-year pre-vocational training stream where the emphasis is on numeracy, literacy, and initiation to vocational training. Upon successful completion of pre-vocational training, pupils have the opportunity to integrate into the National Apprenticeship Scheme and, for some, mainstream technical and vocational training. As from next year, pre-vocational training will be taken over by the Basic Secondary Schools Project. The government is in the process of increasing the intake capacity of the Basic Secondary Schools.

(9) Conclusions

An insight into the role of the Industrial and Vocational Training Board as a provider and regulator of technical and vocational training in Mauritius has been given. Some issues related to the training of people employed in the non-formal sector of the economy have been identified, and measures taken to make formal technical and vocational training more attractive have been discussed.

5.9 An Effective System for Non-Formal TVET in SOUTH AFRICA

by Mr Siphamandla I. XULU

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The Seminar format has suggested the manner in which topics should be discussed. I have tried to stick as far as possible to those guidelines. The format, however, does not always lend itself user-friendly to the emerging TVET discourse in South Africa. For instance, many of us do not think that the emerging policies permit the talk of *non-formal* VET as existing outside the formal system. The point is: these policies displace the emphasis on the institution and put it on learning. Where one learns becomes immaterial in a sense. Instead, what standards one attains receives new salience. Therefore, in talking about non-formal TVET, one has to constantly bear in mind the proposed seamless bands of education and training as evident in the National Qualifications Framework (NQF).

The ensuing paper will briefly outline the background of the shifting vocational education and training (VET) system in South Africa through exploring issues that has necessitated this shift and by presenting the current policies. The topic under which I will talk requires discussion of an effective teaching and learning system for non-formal TVET. "Non-formal" TVET is generally understood to refer to out-of-school, or out-of-formal-institutional learning. For selfish reasons (to myself), I will try to give the broad discussion of non-formal TVET some focus by looking specifically at what is variably referred to as small-scale, informal enterprise sector, small business, Small, Medium and Micro (SMME)[1] or SME sector.

(1) Background

'The World Competitiveness Yearbook (1996) ranked South Africa last out of 46 developing counties in terms of its human resources develop-

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[1] We variably call these enterprises Small, Medium and Micro Enterprises (SMMEs) or SMEs

> ment performance and other labour market indicators'.[2]

Mine is a country that has just emerged from divisions that spawned across our education system, among other systems, and that is continually engaged in processes of forging common vision in most of its systems. In light of that background, one is wary not to speak of a TVET system as an existing formalised system. ***It is, therefore, a system in the making***.

In practice, the past black education system has showed very limited evidence that a TVET system was operational. We have only seen fragmented 'education' and 'training' systems. The matter has been compounded by the country's racial undertones. For greater part of the forty-year apartheid[3] 'millennium', there was the Job-Reservation Act which declared certain jobs as a preserve for specific racial groups. Such a law had impact on training trends that various racial groupings followed.

The notion of integrated education and training has only been formally popularised in the latest policy developments, notably the education White Paper of February 1995 and the Department of Labour's (DoL's) *Skills Development Strategy for Economic and Employment Growth in South Africa* Green Paper. Consequently, all education and training (ET) sectors reflect this thinking, at least in conceptual terms, as it were. We now speak of higher education and training (HET), further education and training (FET) and adult basic education and training (ABET) sectors, a progressive departure from a few years ago when we only had HE and ABE. While characteristics of FET may have always been there in isolated pockets, it is a recent band of our education and training system.

Drawing on Greinert's[4] typology of vocational training systems, South Africa's current education and training policies – SAQA[5] Act and Skills Development Bill, 1997 – classify her as model 3: *the government provides a more or less tight framework for technical and vocational education in private enterprises or other private training institutions.* This is, at least, as far as public resources will be utilised. This framework is currently being negotiated at high policy-making levels by all key stakeholders – government itself, with business, labour movement and civil society. The key features of the framework are the following:

- Social partnership, wherein government, business sector and training providers all assume a share of responsibility in the establishment of a qualified and skilled workforce,
- Learnership[6] concept, and
- Realisable career and learning progression paths for learners.

The brief background outlined above serves to highlight the difficulty there is in spelling out *'an effective teaching/ learning system for non-formal TVET'* in a country which has no history of a TVET system[7]. As a country, we can contribute to this discussion by making tentative suggestions to the issue at hand. At best, we can only predict some of the most likely outcomes of effecting this integration, or alternatively reflect on our 'unofficial' micro-projects that existed outside formal recognition of the past governments. We can also show how well we have listened and looked to other nations beyond our frontiers.

(2) Essential competencies

Part of the effective teaching and learning system relates to the core of what is taught or learnt: the essential competencies. The question is: how does the learning design process decide on these competencies? There are a number of routes of deciding on these. In South Africa, we would be at peace with ourselves in the education and training fraternity if we could just agree on one route. Better still, we are comforted when the international experts encourage us to endure the process of finding the path through engaging in rigorous processes of intellectual scrutiny, instead of hastily wanting to settle for one route before we can explore the other. I will present to you the route that has been proposed by SAQA.

SAQA sees a qualification as a holding mechanism. A qualification should do the following:

1. Represent a planned combination of learning outcomes which has a defined purpose or purposes, and which is intended to provide qualifying learners with applied competence and a basis for further learning.
2. Add significant value to the qualifying learner in terms of enrichment of the person, provision of status, recognition, credentials and licensing;

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[2] Department of Labour (1997) Skills Development Strategy for Economic Growth and Employment Growth in South Africa, Green Paper

[3] As the racial discrimination policy became popularly known in South Africa

[4] From UNEVOC (1995) Establishing Partnership in Technical and Vocational Education, A Seminar for Key Personnel from Africa and Asia, Berlin, 02 –12 May 1995

[5] South African Qualifications Authority is a statutory body created by SAQA Act (Act 58 of 1995). It is entrusted with a task to regulate the National Qualifications Framework (NQF)

[6] A learnership is a mechanism to facilitate the linkage between structured learning and work experience in order to obtain a registerd qualification which signifies work readiness

[7] This claim refers to the absence of integrated ET at a formal (government policy) level. Indeed, there were independent ET providers who can be credited for integrated provisioning in practices long before it became formal policy

enhancement of marketability and employability, opening up of access routes to additional education and training.

3. Provide benefits to society and the economy through enhancing citizenship, increasing social and economic productivity, providing specifically skilled/ professional people, transforming and redressing legacies of inequality.

Clearly, the conception of a qualification is underpinned by an ambitious will to link education and training to the world of work and broader social goals of relevance. SAQA has proposed the categories of competencies that should be developed:

Critical Outcomes

These include communication, finding out information, critical thinking, problem solving competencies and numeric abilities, working effectively, and so on. These competencies will prepare both current and future workforce or citizens for the rapidly changing environment of the modern world of work. It is also these competencies that will enable learners to become lifelong learners. All learning programmes must teach these competencies at various levels of complexity.

Fundamental Outcomes

These outcomes will be taught in the field of Communication Studies and Language, and the sub-field of Mathematics, including Numeracy.

Elective Outcomes

Elective outcomes come from the specialised field of learning. For instance, an elective outcome for a motor mechanic may include an elective outcome on fuel injection.

Such a mix of competencies promises to assist in the 'production' of a skilled workforce of the future. As hinted earlier, there is no reason to believe that such a structured pattern of organised learning will be any different when it comes to the non-formal TVET.

A typical delivery agency of non-formal TVET would be a non-governmental organisation (NGO). This NGO may be offering a qualification for a *Welder* in the SME sector. Irrespective of the sector in which trainees will ultimately perform (whether formal or informal sector), the trainee will be expected to deliver goods to the nationally accepted standards as set in the NQF. It seems, though, that there may still very well be variations in the processes that learners may engage in under different learning contexts. One factor determining these variations is the nature of equipment that will be available for training purposes. Whereas the formal training institutions are more likely to have state-of-the-art technology, non-formal training providers may have low-technology equipment to use for training purposes.

(3) Features of teaching and learning systems

In discussing the key features of teaching and learning for the TVET system, this paper will explore both external and internal features[8] of this system.

A concept *'applied competence'* has gained support in the Green Paper as a useful tool in breaking new grounds in the field of education and training in South Africa. The concept is seen to be:

1. Allowing for a breakaway in the typical rote-learning form of learning that has characterised education for black South Africans through the former Department of Education and Training (DET).
2. Marking a move away from a narrow conception of competence as referring only to task performance.

It is hoped that this concept, and its subsequent implementation, will be increasingly endorsed and practised by all those involved in the business of education and training. Designing our learning programmes for the SMME sector with this newer understanding of *competence* will add quality. I am convinced that this concept can be.

Flexibility is the key feature of the teaching and learning system for the informal enterprise sector. Flexibility here refers to a number of aspects of the informal sector ET. It encompasses flexibility with time, with training venues, with levy systems and with teaching personnel. The need for flexibility is underscored by divergent needs of learners in the informal sector.

With regard to time allocation for teaching and learning purposes, the circumstances of participants in these programmes must be taken into account. Equally, accessible and convenient venues must be agreed upon between participants and learning facilitators. While accessibility of the venue should be a priority, the respectability of the venue for 'status' purposes also requires attention. The status issue is particularly true for youth programmes.

Contrary to the common practice, where only people with teaching expertise (trainers and teachers) facilitate the learning process, there should be more flexibility in allowing other practitioners to input into the learning. For instance, programmes must be designed such that practising enterprise owners can be brought in from time to time to share first-hand enterprise knowledge with the novices. The trainers' expertise can be put to good use in assisting these non-teaching professionals in planning their input.

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[8] Internal features - in this discussion - relate to those elements that relate to cognitive processes: processes of the mind. The external features relate to the broad organisational issues, such as arrangement of the classroom, composition of learning groups

Lifelong learning or continuous education is another feature that is increasingly receiving the attention of developing economies.

There is a constant need for *guidance* of learners in the non-formal TVET system as in any system. This need is enhanced by the circumstances of the typical learners in this system. Often learners in this system are outside the mainstream of the societal economic framework. They consequently need to be constantly nurtured.

Evidence from the (economic) winning nations indicate that their training focuses on the *whole person by developing cultural values and work ethics.*

(4) Essential support facilities

The assumption that "training and more training will yield successful entrepreneurs" is ill-founded. Training alone is inadequate to assist small-business entrepreneurs. The White Paper on Small Business Development and Promotion (1995) identifies the following support areas:

- Access to finance,
- Access to markets,
- Access to information,
- Access to technology,
- Access to advice and training,
- Other support areas.

For purposes of this Seminar, it suffices to flag only the holistic support areas that any SME training provider should be aware of. In my country, we believe that we have realised a need to be project-driven instead of boundary-limited. We are learning to implement new alignments and partnerships among various role players. At government level, there are mechanisms to effect inter-departmental co-operation among different departments in support of the SMME sector, viz.: Department of Education, Department of Labour, Department of Arts, Science and Technology. We are encouraging the principle of co-operation to filter down at all levels of intervention.

(5) Prior learning

Recognition of Prior Learning (RPL) is another route for awarding qualifications. A 'qualification' may be achieved in whole or in part through the recognition of prior learning. This concept includes learning outcomes achieved through formal, informal and non-formal learning and work experience.[9] The site of learning will be less important for formal recognition of skills attained. What will count is whether the participant does meet the set national standards when assessed through the RPL system.

Many training programmes in the small-business sector teach people who have previous working experiences. This experience needs to be recognised if further learning is to be realised. Also, providers of education and training need to be reminded that most participants come to these programmes in order to improve the current performance of their enterprises. Therefore, thorough diagnostic facilitation can help teachers to discover the previous learning experiences of participants.

Prior learning can be related to, at least, three key skill areas: business skills, technical skills and entrepreneurial skills. A qualifier about the usability of the RPL is in order. As mentioned earlier, all the development processes are still underway in South Africa; there has not yet been formal implementation of RPL. The logic is that national standards need to be in place first and be registered within the NQF. Then the assessment process for purposes of recognising worthwhile prior learning will begin.

(6) Teaching/training personnel and their preparation

This country has recently seen an unprecedented importance being attached to small-business sector development. Our economic strategy – Growth, Employment and Redistribution (GEaR) – adds to this formal prioritisation by seeing the development of SMME sector as a key tool for effecting job-creation and economic redistribution. With all this, preparation of qualified teaching personnel to support this sector has never been great.

The notion of integration permeates the entire thinking on education and training. In its 1994 National Training Strategy Initiative (NTSI) discussion document, the National Training Board coined a new term for the 'person who facilitates learning', who could variably be called a trainer, teacher or educator, or development practitioner: an Education, Training, Development Practitioner (ETDP). This was justified by the reality that: 'The inclusion of Adult Basic Education (ABE) and community development into the training function makes it necessary to develop a new kind of trainer to meet the specific demands in South Africa. In addition, the inclusion of teachers in technical schools, technical colleges and technikons joins three traditionally separated sites of training together and begins to dissolve distinctions between the provisioning of formal and non-formal training'. The term ETD practitioner is seen to depict the notion of integration while, at the same time, recognising the differences which still exist.

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[9] SAQA, Notice 1240 of 1997

This new way of thinking about practitioners demands that practitioners be trained differently.

Recent policy proposals suggest that we develop a dynamic pool of teaching practitioners. Where it will be difficult to have all qualities embodied in one practitioner, a co-ordinated mechanism that brings together practitioners with specialised expertise must be put in place as the sector demands multi-disciplinary inputs. These expertise areas are teaching expertise, occupational expertise and contextual expertise. In practical terms, the pool of SME development practitioners include trade specialists, loan officers, marketing people, research experts (for feasibility studies), educators, etc.

(7) Conclusions

In concluding this talk, the point must be reiterated that SME development is best facilitated through holistic interventions. A holistic intervention does not only see an SME as a learning field, but as a form of workplace. A plea is made here to view the SME sector as *another* form of workplace by those who offer some form of support to it, particularly training and education support. In viewing the sector this way, commonalities and differences to the (big) formal sector should be borne in mind. One of the key similarities of the SME sector to formal sector is that they both require a technically skilled workforce. Practically, people from the formal sector have been able to transfer *some* of their skills to the SME sector quite successfully. Indeed, in other ways the SME sector is unique. It is here where we need to focus. Understanding of this uniqueness will help us design programmes that meet the need of the SME sector in its own terms. The key distinguishing characteristic of the SME sector lies in the demand it makes on entrepreneurs to be *creators* or *sustaining agents* of businesses they own. This calls for a particular set of skills that are generally not on offer in the training field. Therefore, if we are to make any meaningful contribution to SME development, we must recognise this workplace for what it is first, and design around that. Unlike other education and training systems (say GET, FET and HET) whose primary purpose is learning, the primary purpose of the SME sector is the *development of thriving enterprises*. Quality referencing of any interventions should be to development more than to education and training.

Lessons elsewhere stress the importance of clear *target group identification*. One of the causes of the low success rate of SME support lies in the conflation of the profile of those who participate in it. Some of the identifiable targets are:

- Youth,
- Retrenched people,
- Persons with disabilities,
- Rural-based people,
- Women,
- Those already in the labour market without skills,
- Those employed in the SMEs,
- Those already in SMEs with skills, wanting to remain in self-employment,
- Prisoners.

Clearly, there are seamless boundaries among these profiles. Experience shows that target groups will respond differently to similar interventions. For instance, youth with no work experience, low level general education and a high immaturity level are not likely to respond favourably to self-employment initiatives. The discussion on which employment creation model best fits which target group profile is not within the ambit of this discussion. The point to be noted, however, is that growth and development of the small-scale sector requires more than an instrumentalist education and training support. There is a need for a stronger external environment of co-operative networks.

5.10 Essential Features of the Non-Formal Sector in SWAZILAND

by Mr William S. A. SHONGWE

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The paper sets out to highlight some essential features of a teaching/learning system that will meet the needs of the non-formal education sector. This paper will endeavour also to highlight some deficiencies in the Swaziland education system which makes the Swaziland Technical and Vocational Education component defective and quite unable to deliver the anticipated "goods".

(1) Planning

Such essential features as planning education and training which play an important role in the development and sustenance of the informal sector are missing. The informal/non-formal sector plays a crucial role in the economy of the country as it provides employment in a number of income generating activities. Those that have succeeded as business people in the non-formal sector have done so through trial and error and they have not been prepared through formal education. It is important to note that the education policy that currently exist only covers general education and university education. However, it is silent on technical and vocational education which is so essential in developing skills for the human resources to equip them for the formal sectors.

(2) Policy

Central to, and as a guiding principle to a comprehensive, credible and sustainable Technical and Vocational Education System, should be a clear and dynamic education and training policy. Unfortunately, in Swaziland to date, such a policy is not yet in place. To meet the essential features of a teaching/learning system for the informal sector, we need a well-researched and properly designed system capable of meeting complex development goals, and theoretical assumptions in conjunction with a well-thought-out Technical and Vocational Education System. Efforts are currently being made to hold meetings, workshops and seminars to mount a policy. That policy, we hope, will also clearly define the position of Technical and Vocational Education in Swaziland.

As a short term solution, for example, the present vocational institutions can assist in a manner to kick-start training for the informal sector. Also, Government could help provide a financial stimulus as start-up capital to informal sector entrants as they lack necessary collateral at this formative stage.

(3) Economic benefits

The country should aim at emancipating the citizens from economic bondage to economic independence. That cannot be achieved through lip service, but by putting in place a supportive entrepreneurial infrastructure. For example, small-scale business people who landed there on their own initiatives should be motivated by easing down unnecessary barriers in obtaining trading licences, the quality of work premises, etc. There is no clear existing articulation between various training institutions and the non-formal sector in Swaziland except for one institution, MITC's Business Management Extension Programme, which helps groom small-business people by offering short courses and workshops. Otherwise, all the technical and vocational education institutions, including the university, train for the formal sector. It is hightime there is a shift of emphasis from training for the formal sector to training for the informal sector in order to help the graduates develop skills of job creation.

There needs also to be proper recognition of graduates with technical and vocational qualifications by government, as a respectable class of professionals in order to market the profession. It should be acknowledged that technical and vocational education graduates are the ones who make the country run by maintaining the essential services on a day to day basis.

(4) National policy on technical and vocational education

The absence of National Policy on Technical and Vocational Education and Training compounds the problem of non-formal training in Swaziland. It is noted that developing Technical and Vocational Education beyond and within non-formal systems of education has been hampered by misinterpretation of the non-formal concepts as a way of learning. The social perception led to non-acceptance and less recognition of graduates who acquired education and training through the non-formal route. The perception is formed as a result of viewing the non-formal system as the extreme end of the formal continuum in learning, instead of treating the two concepts as complimentary segments making up a circle. Furthermore, it is noted that a majority of those in education management are products of the formal system, so naturally they would give credit to it because they understand it better.

Technical and Vocational Qualifications are considered to be second or third-class quality by the Swaziland Government and, in most cases, not popular for modern sector high posts. With regard to attitudes and values of influential elite interest groups, they argue that the inherited academic education system is the best for modern sector employment, basing their argument on present localisation and promotion in both public and private sector organisations, as promotions are currently based on academic qualifications.

(5) Non-formal TVET

Non-formal technical and vocational education and training institutions are viewed by the general public and its beneficiaries as second or third choice institutions for those who have failed to secure places in prestigious academic institutions like the University.

(6) Financing

There is a big anomaly in the financing of technical and vocational education in Swaziland. Some technical and vocational education programmes are financed by the government but others are not and the criterion is not clear. For instance, all students registered for technician/diploma programmes have automatic sponsorship and all students registered for craft/certificate programmes have to fend for themselves; yet, when it comes to employment in the market, the ratio is 6 : 1 in favour of the craft category. So, it would be reasonable for the government to evenly distribute the sponsorship to all students irrespective of category of study. Furthermore, the reluctance of private enterprise to pay for technical and vocational education weakens the financing of this aspect of education.

The distribution of the education budget also does not favour technical and vocational education. Over the years, the university has been taking 42% of the budget, with the remainder shared amongst schools and other institutions including technical and vocational institutions, because politicians still regard university education as *the* education despite producing unemployable products.

(7) Future plans

However, efforts are vigorously being made to introduce a technical and vocational education programme called Vocational Education And Training (VET). This will be a tripartite kind of project involving such stakeholders as government, private enterprise and training institutions. It will target school-leavers and train them in both technical and vocational education with strong emphasis on entrepreneurial skills. That will make a departure from the existing training for the formal sector, and most of the training will be hands-on at the place of work. In this partnership, both government and private enterprises are assuming essential responsibilities towards educating young people for the informal sector in order to alleviate the high unemployment rate. Currently, it is only private institutions and NGOs that have taken the initiative of skills training for the informal sector. Government is lagging far behind.

Such are the concerns which tend to undermine the teaching/learning system to meet the needs of the non-formal education sector in Swaziland. However, we trust that with time, when a clear education policy is in place, the attitudes of the society will be persuaded to accept technical and vocational education and training as an essential facet for the educational system and, hopefully, the non-formal education sector will gain its rightful place in the education system of the country.

(8) Conclusions

Efforts of all the stakeholders may not bear fruition unless there is put in place within the Ministry of Education, which is charged with training, a department of technical and vocational education headed by its own director and qualified personnel. In collaboration with other stakeholders in technical and vocational education, they would continually review the curriculum, carry out research, and advise stakeholders of any changes and improvements necessary.

5.11 TVET at Mwanza Rural Housing Programme in TANZANIA

by Mr Lunogelo L. SAKAFU

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(1) The Mwanza Rural Housing Programme

The Mwanza Rural Housing Programme operates in the region of Mwanza on the southern shores of Lake Victoria. In this region, the programme works in three of the six districts and, in each district, the project works in one of the five to six divisions. Hence MRHP works in 3 divisions, in 3 districts of Mwanza Region, covering a population of about 200,000 people.

(2) Methodology

The strength of MRHP is its methodology whereby the most intensive working level is at the level of the village where the project works directly with those people involved in improving the habitat situation. The target population starts with the builder who is attempting to improve the quality of his/her living environment and also involves the producers of building materials, the craftspersons (mason, carpenter), the transporting of building materials, the provider of services to the building environment (efficient stoves, water harvesting, sanitation) etc.

With the target population, the project pursues a participative learning process to:

- Discuss and analyse the housing problems of the target population,
- Prioritise the problems to determine those that need immediate attention,
- Develop participative techniques to solve these problems based on locally available resources,
- Testing and trying out the developed solution to select those that are most appropriate for the existing environment,
- The design and implementation of dissemination strategies to be used so that the target population can adapt and adopt the developed solutions to the housing problems,
- Participative monitoring and evaluation of the whole process.

(3) The problems of housing

MRHP sees its main function as that of facilitating the housing improvement process. According to the

Tanzania National Housing Policy, house owners have the ultimate responsibility to provide their own shelter. As such, MRHP assists the builder to acquire the means to build an improved house according to their affordability, taste and choice.

To achieve these goals of facilitation, MRHP and the target population found that the major housing problems fall under four headings:

1. Building materials.
2. Skills.
3. Finance.
4. Organisation of the builders.

The target population requires empowerment in these fields to be able to solve the problems of housing. Within these issues there are external and internal constraints that need to be addressed by the householder as well as by MRHP. The major choice made is to start as much as possible with what is existing and then later to explore the need for optimisation.

(4) Building materials

The target population clearly stressed that the high cost of industrially produced building materials was a external constraint. At the same time, the cheap locally-gathered building materials are biodegradable, or they are weakened by natural elements so that houses built of these materials last for only a few years.

The ideal solution selected was for local production of improved building materials using locally available resources and some industrial materials. The means chosen was the establishment of small scale enterprises producing tiles, burnt bricks, soil cement blocks and other low-cost building materials. The support package for such local production units included:

1. Training of masons and youths, with special favour provided for women to develop skills in production of low-cost materials. The training in new skills was made as practical as possible: usually the trainees would spend 90% of their time in workshops.
2. Assisting the trained youths in a locality to establish a co-operative or group to produce the materials. The group approach was chosen over individual producers, as in this way, we could teach more people in later years. Many groups have established their own individual enterprises. These enterprises are employing many people who are obtaining incomes from sale of building materials.
3. Arranging exchange of experiences between groups. MRHP felt that experiential learning between groups was quite a powerful tool for training adults. Sometimes the exchanges have been with groups outside the country (links to Kenya and in Uganda), though most exchanges are organised within a division as this is very cost effective.

(5) Skills in construction of houses

With these new skills, it was necessary to retrain the masons and the roofing specialists. MRHP organises about two annual courses to teach craftsmen and builders to build houses using burnt bricks, soil cement blocks and micro-concrete tiles. Such a course lasts for 2½ to 3 months. This may be a short period, but we are only retraining craftspersons who are already familiar with their trades. These courses usually involve 10 to 15 people. We think such practical training should involve only a few participants at a time as we want all of them to pick up the new skills. MRHP usually provides financing to run such courses.

(6) Housing finance

Even with low-cost materials, the house builder has to spend money on the new house. With traditional materials, there was little or no expenses needed to buy materials since they were collected from the neighbourhood. With improvements to the local materials, a cost element is introduced to be borne by the house builder, first to buy the materials, and secondly to pay the craftsman to assemble the materials into a house.

For most builders, MRHP assists them to increase farm incomes by applying animal manure. Each village prepares a village plan for hiring the MRHP truck. The truck stays in each village for about four days, transporting manure for 10 to 20 builders. With this approach, farmers harvest more crops, and the extra income is in many cases used to improve housing.

At the same time, MRHP builders, in order to initiate savings and credit, have developed further. To date, MRHP works with over 200 savings and credit groups. As the groups take bigger credits, their businesses are increasing in size. A few of the larger groups are assisting their members to buy building materials.

The emphasis with this programme is to increase efficiency and turn over more business activity. Only enough surplus has been generated for the people to invest in housing.

MRHP does not go for housing loans directly. MRHP prefers to strengthen the financial resources of the target population first, so that when their affordability levels are higher, they may choose to invest in housing.

To facilitate savings and credit, MRHP runs several courses, depending on the stages that group members have reached. These stages consist of:

1. As groups emerge in their villages they need to clarify the group functions. The group may want to

work on a communal project (e.g. food-vending) or they may decide that each individual runs his own business. This group attends a training course on how to choose your business. This training is given to new groups in the village.

2. As the groups approach the stage of applying for a loan, they have to be trained on procedures of processing a loan and the various decision-making levels.
3. When the group receives the loan, they get a training on how to use the loan money to be able to meet the loan conditions.
4. At any time, some groups may want to be trained in specific skills such as business-marketing, how to sell goods, conducting marketing campaigns, etc. These are skills needed to strengthen the functioning of the group, and are important according to the stages reached by the beneficiaries.

MRHP makes close follow-up on the performance of the groups who have taken up loans. This has helped to ensure that, in three years, all groups have repaid their loans: 97% of the groups have repaid on time, whereas 3% have been late in repayments. The number of groups taking loans has increased from 2 in 1994 to 11 in 1995, 30 in 1996, and 53 by August 1997.

(7) Housing services for energy and water

As a part of improving the quality of life in the built environment, MRHP has introduced energy-saving cooking stoves which use firewood and charcoal more efficiently. In order to ensure that these stoves are available in sufficient quantities, MRHP organises training courses for women groups that want to produce stoves as a business activity. Up to now there are groups producing improved stoves in all the divisions that MRHP works in.

In any year, MRHP trains three to four groups, of five to eight members in each group. At least 50% of these groups provide training to other groups in their neighbouring villages. This process is spreading throughout the working area; that is, groups and individuals providing informal training to other groups.

(8) Closing remarks

1. NGOs working in collaboration with MRHP feel that training and skills transfer is an effective empowerment means. To ensure that housing improvement is adopted by the target population, MRHP spends a lot of funds and energy in training.
2. The target population is increasingly asking to be trained in new skills to meet new challenges.
3. There are no nearby formal training institutions that meet the training needs expressed by the beneficiaries of MRHP. The Community Development Training Institute has, however, been able to provide us with trainers who could adapt to our technical training needs.
4. There is a need for MRHP and other NGOs to realise that training may be the most efficient way of facilitating the development of adults. A partnership in training needs to be developed between institutions and their beneficiaries.

5.12 A Case for UGANDA
by Dr Ben M. Manyindo

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(1) Introduction

Vocational training in Uganda is the responsibility of the Ministry of Labour and Social Welfare (MLSW). However, other ministries have their own training programmes geared at meeting their specific objectives. Government focus has of recent times shifted to embrace training beyond the formal sector, given the limited access and opportunities available by the formal training institutions and the growing numbers of unemployed people in the country. The challenge for both Government and the NGOs and private sector is to work together to design and implement vocational training programmes that create employment on a sustainable basis through demand-driven training as well as training for self-employment.

The challenges are not easy tasks as the target group is varied in terms of educational background, customs and cultures, levels of expectations and age groups. The existing laws and regulations also do not favour various initiatives targeting the informal sector.

The current official system of skills training is very inflexible, centralised, and built on concepts originally suited for the formal large-scale industrial settings. Further, the entry requirements and certification are unrealistically high, marginalising the majority of potentially new entrants to the institutions and the labour markets. The range of skills offered in the country is largely limited to a very small number of urban and semi-urban crafts, and is very gender-biased with only a few crafts open to women.

(2) Labour and employment issues

Uganda's labour market is marked by a young population, with over 56% (approx. 9 million) being between 15 to 34 years old. The labour force is characterised by a high proportion that has little or no education and largely located in rural areas. The low level of educational background precludes this large population from participating in formal skills and technical education programmes, yet a non-formal focus on skills training is not yet fully developed. The major challenge facing the country, therefore, is to provide employment for the large number of youth and women as well as providing the general population with skills which will enable them to participate more productively in the economy.

Job opportunities in the formal sector have reduced drastically due to privatisation following a direct policy of economic liberalisation. Government has assumed the role of providing conducive policy measures to support the private sector and to ensure that the population is fully involved in the economic development of the country.

Given the restrictive absorptive capacity of the formal sector which currently engages about 12% of the total labour force, the extent to which employment opportunities can be generated for new entrants to the labour force (about 300,000 entrants per year) is limited. As a result, limited opportunities from growth in the economy (about 5% GDP per annum) aggravate the problems of unemployment, under-employment and rural-urban migration.

Uganda does not have an employment policy yet although the Ministry of Labour and Social Welfare is in the process of finalising one. However it is the view of the author that the National Employment Policy should promote employment opportunities, reduce poverty; and increase labour productivity to ensure fuller utilisation of the human resources available, taking into consideration the social economic conditions of the country.

(3) Informal, micro and small-enterprise sectors

The informal, micro and small-enterprise (IMSE) subsector in Uganda is described as one which employs all categories of human resources utilising labour intensive methods, low technology, low employment capacity per unit, limited market and information flow, operating from diverse locations, and using diverse inputs including recycled materials.

A majority of informal sector workers are either illiterate or semi-illiterate and do not participate in any formal training either prior to joining or on the job. They are either self-taught or learn their trade while working in some other small business.

A study by USAID (July 1995) estimates micro and the small-enterprise sector employs about 20% of the population of working age. Furthermore, this subsector (IMSEs) provide alternative sources of income for people from other activities, such as agriculture, private and public sector employment, and other businesses.

Micro and small enterprises play an important role in the national and household incomes. However, due to lack of reliable data and information, this role has not been properly documented. Promotion of IMSE sector in Uganda is a key means of bringing about sustainable development, particularly targeting the majority who live below the poverty line.

This sector has continuously absorbed the increasing number of urban employment-seekers that include school-leavers, rural-urban migrants, retrenchees, demobilised soldiers (veterans) and town dwellers. It is estimated that this sector provides employment for 14% of the labour force against 5% employed in the formal sector. It is further estimated that the sector absorbs 20% of the annual increase in the urban force from all services.

The need for national policy definition and strategy for this subsector stems from the fact that micro enterprises are the most dynamic element of the economy of Uganda. The very small family-based enterprise or sole proprietorship comprise a large and growing part of the private sector with a high potential of generating output, employment and incomes, and strengthening inter-sectoral linkages leading to a more broad-based participation particularly by the poor and by women. In light of the above, micro-enterprise development has become a more central part of the Private Sector Development Agenda and, therefore, a concerted effort to address the constraints in view of establishing sustainable local systems and institutions facilitating their creation and development.

(4) Key constraints for IMSEs

The Ministry of Labour and Social Welfare spearheads the main streaming of the informal sector in order to promote micro and small-scale enterprise development with a view to creating employment and improving management efficiency and productivity. However, the sector faces numerous constraints, starting at the policy level, down to the level of individual enterprise operations and self-organisation of the sector in general. The sector requires an integrated assistance in order to achieve sustained growth. Skills upgrading, marketing assistance and training, legal environment improvement, access to credit, improved technologies and product development are areas where interventions are most required.

Despite the macro-economic reforms undertaken by the Government of Uganda. the IMSE sector has not yet benefited. The following constraints still exist:

1. Lack of Policy Framework, especially the absence of a comprehensive national employment policy within which the informal sector would be defined.
2. Absence of one solid institutional framework to facilitate Informal Sector and Micro-Enterprises Development.
3. Lack of access to financial services seems to be the single most critical constraint.
4. In the field of training and capacity-building the major constraints include:
    - An agreed definition of IMSEs in Ugandan context is still lacking,
    - Inadequate information about IMSE training providers and facilitators,
    - Inaccessibility of IMSEs trainers and facilities in formal training,
    - Inadequate specialised human resources in specific skills,
    - Low education levels of target group, making communication difficult.

On finance, formal financial institutions (such as banks) have traditionally shunned away from giving credit to the poor because they categorised them as "high-risk customers without security". Micro-finance is now widely acclaimed as critical to economic development in Africa. Its ability to reach the grassroots communities in countries where it has been implemented has opened doors to economic participation by the poorest of the population with tremendous potential for poverty alleviation. In Uganda, Government has established a small micro-enterprise policy unit in the Ministry of Planning to cater for this aspect.

(5) Efforts by the Government of Uganda

Government under the Ministry of Labour and Social Welfare is taking measures to develop and improve informal sector operators' skills and to provide an enabling environment so that the potential for this sector can be harnessed. Special consideration is accorded to women, youth, and the disabled to establish micro-enterprises and to generate employment for them.

The same Ministry has now embarked on the final stage of drafting an employment policy for the country. A lot of work has been done over the years on this subject but, due to budgetary constraints, the work had not yet been completed.

Also over the past five years or so, the Ministry, under the Directorate of Vocational Training with assistance of donors, has held a number of workshops, seminars and meetings with stakeholders over formulation of a National Vocational and Industrial Training Policy. During this year (1997), the German Government, through GTZ, will facilitate the formulation of a Vocational and Industrial Training Policy.

(6) Skills development in the non-formal sector

Apprenticeship

This is the oldest form of training, and the main mode of skills acquisition and provision in the non-formal sector in Uganda. Studies have shown the majority of entrepreneurs have no formal technical/vocational training background on entry, and gain skills within the sector. The trainee has to locate a willing partner (often family member or friend) and will undergo an extended period of training. This type of training can greatly be enhanced if opportunities are available from vocational training institutions for upgrading and polishing of the skills leading to trade testing.

Proficiency skills

This is where a group of trainers work alongside the trainees to improve their skills. In Uganda, this is carried out by a number of NGOs, churches, community groups, associations and individuals who have set up skills training. These institutions cater for the social demand of training, focusing mainly on the youth and/or special and needy target groups. The training is a mix of formal and non-formal approaches and does not necessarily follow any recognised curricula or format. The type of training provided varies considerably in terms of quality, duration, costs, etc. The quality of training is often low, with graduates being semi-skilled.

The courses are of short duration (6-12 months) and are aimed at providing the trainees with proficiency skills to do the job. The curricula are tailored to suit the demands and resources of the specific locality and the surrounding environment. The training is basically practical work enabling the learner to perform the tasks without necessarily understanding the theories behind the technology/skill.

The skills enable the learner to enter income-earning activities through self-employment or employment in the locality. The courses are community based in order to enhance the local talents and resources. Among the courses offered are handicraft making, cookery, tailoring and sewing, pottery, poultry keeping, masonry, brickmaking, improved agricultural practices, shopkeeping, photography, horticulture, painting, hairdressing, bicycle repair, blacksmithing, embroidery and needle work, food processing, etc.

(7) Concluding remarks

In Uganda, there are a number of technical and vocational centres. The courses take varied periods and include artisan training, craft training, technician training and engineering courses. The output from these courses per year is about 10,000 graduates, which is a very small number compared to the number of people that require such type of training. Access to these institutions is limited by various academic requirements for entry, available places, and demand for the skills in the economy. Their skills training is also narrow, limited to less than ten industrial trades, leaving the rest of the activity areas with no opportunity at all. This formal training locks away the majority of under-employed and unemployed Ugandans. Non-formal training is thus the way forward towards modernisation and skills training for all in a country such as Uganda.

IMSEs form a large and growing part of the private sector with a high potential of generating output, employment and incomes, and strengthening intersectoral linkages. The need for Technical and Vocational Education and Training to respond to their needs cannot be over-emphasised as the only way forward to economic growth and prosperity.

In light of the foregoing, deliberate and urgent assistance should be directed to facilitating policy formulation, planning and execution of a strategy for an integrated vocational training approach in the country. This strategy should, in the short run, be focused on providing the large number of youth, adult, and especially women, with skills which are applicable in and relevant to their social-economic environment. It should be linked to sector orientation in the local regions and utilise the existing regional economic and institutional resources.

The policy should be developed in accordance with the promotion of the IMSE sector. It should be linked and interact with the IMSEs promotion requirements and activities, with regard to their skills training needs and skill training provision potential.

Innovative methods such as "Learning Without Frontiers", recognition of prior learning, and support of NGOs initiatives in the field of vocational training is the way forward to train more people cost-effectively in a wide spectrum of skills, improve the quality of training, and offer incentives for self-employment after training. As a first step, however, proper policies must be put in place and supported. Implementation of the policy must then look into all aspects of curriculum, facilities, trainers, etc.

Training should primarily allow for, and integrate, non-formal and modular training approaches besides formal training as two possibilities for acquiring applicable and economically relevant technical skills. The scope of vocational education and training requires to be expanded beyond a few industrial-related crafts areas and should include enterprise development.

Harmonisation and standardisation of education and training need to be articulated, and embrace more than trade-testing and examinations. Quality standards should be developed such as training concepts, flexible curricula development, delivery systems, capacity in staffing, management systems and financing strategies.

Effective training can only be undertaken after policy formulation in order to guide the implementation process. Thereafter, a number of critical activities can be undertaken in the case of Uganda. These include:

1. Establishment of an inventory of IMSEs in the country and categorising these into various trades.
2. A skills needs assessment for different groups, development of curricula and training materials.
3. Identification of local trainers already involved in the trades ("the master") within the locality to be trained as trainers, and facilitated to carry out community-based training within their own localities.
4. Putting in place an institutional framework for management of the national training programme, using, to minimise on costs, existing Government and NGO structures, from the grassroots to national level, to oversee, co-ordinate and evaluate the system.

A change from the present pre-service formal training system towards the on-job and in-service training in the work place, complemented by theoretical training, requires private sector support and local efforts while retaining overall public management of the training. The need to sensitise and enter into dialogue with all stakeholders and obtain their support becomes a necessary and critical activity in the implementation process for the success of the training.

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5.13 Training for the Informal Sector in ZAMBIA

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(1) Introduction

Problem

In the last five years, the Zambian economy has experienced a market rise in the number of people entering the informal sector as a result of diminishing opportunities for employment in the formal sector.

This increased activity in the informal sector of the economy has not been matched by the type of training offered by technical and vocational training institutions. Training institutions have gone on preparing their students for formal sector employment without notice of the changed needs of the economy.

Up until now there has not been a provision for informal sector training in Zambia's Technical Education and Vocational Training policy.

(2) Purpose and scope of this paper

This paper focuses on the provision for informal sector training in the Technical Education, Vocational and Entrepreneurship (TEVET) Policy of the Republic of Zambia.

The paper also discusses the proposed strategies for implementing informal sector training in terms of the short and long term interventions, and the implementational constraints to the strategies.

(3) Situation analysis

Empowerment opportunities

When the Commission for Technical Education and Vocational Training was established in 1968, its mission was to offer pre-employment training to satisfy the needs of Zambia's labour market at the following competence levels:

- Technologists to support professional engineers,
- Technicians to direct activities of craftsmen;
- Craftsmen to carry out hands-on craft work with minimum supervision.

In addition to these competence levels, other options were:

- Trade test progression,
- Training in non-technical occupations and applied arts.

All these plans enshrined in the 1968 policy on technical education and vocational training were targeted at the formal sector labour market. Industry and commerce had no trouble accommodating all the graduates of training institutions.

In recent years, industry and commerce have not been able to continue recruiting technical graduates as before for two main reasons. First, employees have been dissatisfied with the competence of the graduates. The main criticism is that graduates are not given much practical training during their stay at college as training institutions do not have sufficient training materials. Companies (for other reasons as well) find it better to poach workers already developed by other companies than to employ an inadequately trained graduate.

Secondly, there has been a significant drop in the employment opportunities on the formal number of the unemployed.

(4) Training opportunities

Currently, the Department of Technical Education and Vocational Training (DTEVT) has over sixty different training programmes delivered at eighteen institutions spread across the country. The total enrolment of all DTEVT institutions put together is 5,177. This figure represents 50% of the possible enrolment total since DTEVT is utilising only half of its capacity.

Out of over 20,000 eligible grade 12 school-leavers every year, DTEVT is only accepting a little under 3,000 candidates. There are, however, 318 non-DTEVT training institutions supplementing DTEVT programmes and offering an additional 14,000 enrolment places.

The department is planning to double its enrolment figures through various ways, including additional outlets, by establishing satellite campuses for existing institutions, and setting up new institutions, open-air training centres, and multi-purpose community centres. This expansion programmes will be targeted mainly at the informal sector in view of the diminishing job opportunities in the formal sector.

(5) Policy on informal sector training

The inadequacies in the training system prompted the Ministry of Science, Technology and Vocational Training to review its policy on Technical Education with the assistance of the Governments of Denmark and the Netherlands.

The new policy is different from the 1968 policy in three ways:

1. It incorporates entrepreneurship development.
2. It encompasses all types of technical education and vocational training; e.g. nursing, agriculture, etc.
3. It covers training in both the formal and informal sectors.

The TEVET policy recognises three aims of training:

1. To balance the supply of skilled labour at all levels with the demands of the economy. (It is noted that although training institutions are currently targeted at the formal sector, only 30% of the employed labour force is engaged in the formal sector. The majority of the informal sector labour force are youths and women without the necessary educational qualifications to compete for places in training programmes).
2. To act as a vehicle for improved productivity and income generation.
3. To be an instrument for the minimisation of inequalities among people. (The vulnerable groups in Zambia are found in the rural, semi-urban and low-cost urban areas forming part of a dominant informal sector).

In pursuit of these aims, with specific reference to entrepreneurship development, self-employment and the informal sector, the Government will aim to enhance the ability of the labour force to start and run viable growth-oriented business enterprises as a deliberate career alternative. It is the Government's intention to strengthen the capacities of the education system, and the technical education and vocational training institutes in this regard. This will enable them to deliver quality training aimed at facilitating the performance of the informal sector, and of the graduates from these institutions wishing to engage in self-employment.

(6) Proposed intervention strategies

Direct intervention

Direct intervention involves the provision of facilities for effective delivery of training in line with the principle of decentralisation. This, practically, means delivering training as near as possible to where informal sector operators are.

There are three strategies in which this delivery based on the principle of decentralisation can be achieved:

1. Setting up of resource centres to cater for the sector. There are two approaches to the setting up of resource centres:
   - First, where there are no existing building facilities, resource centres will require establishment of new multi-purpose building facilities including the provision of machinery equipment, tools, teaching staff and teaching aids, etc.,
   - The second approach is using existing building facilities for the government departments such as community and welfare centres which are in close proximity to the working places of informal sector operators. This will require the co-operation of other government departments.
2. Provision of trainers and training materials, aids, equipment and other facilities for the resource centres. These will be needed in all resource centres established. This will involve the use of existing lecturers within government departments, and outstanding entrepreneurs as master craftsmen, who could be engaged as consultants/lecturers/ instructors.

(7) The design of training programmes

Training programmes will be designed taking into account the diversity of skills used and the working conditions in the informal sector as well as its magnitude. The fundamental issues that must be recognised in designing the training programmes include flexibility in timing. Training programmes will include entrepreneurship development and safety and health aspects at working places. This will strengthen the managerial skills of micro-enterprise operators which have been observed to be weak by a number of surveys, and will also result in the general improvement of their working conditions at places of work.

(8) Indirect intervention

People have already taken up the challenge to upgrade their skills through processes such as on the job training and apprenticeship. In addition, they have taken initiatives to acquire the skills by enrolling at private training institutions. However, the impact of these individual initiatives on the skills acquisition process in the informal sector is limited.

Against the background given above, the major thrust of the TEVET strategies in the long run will focus on:

1. Institutional capacity building

This will involve facilitation of micro-enterprise entrepreneurs (master craftsmen) and private/NGO institutions to build their institutional capacities to widen their training capabilities so that they can effectively include the informal sector. The facilitation should not come about through legislation which tends to impose restrictions, but through putting in place policy reform measures which will foster delivery of training by the private sector, NGOs and micro-enterprise entrepreneurs for the informal sector.

2. ***Training of trainers***
As part of institutional capacity building for both the master craftsmen and training institutions, the government will facilitate the training of trainers to train informal sector workers to acquire skills needed to operate micro-enterprises in the informal sector.

3. ***The promotion of associations***
The urban informal sector is operating without any representation by associations. This absence of representation makes it difficult to adequately link informal sector operators to any training programmes. Therefore, efforts will be made to stimulate the sector to organise associations which will be used as institutions of linkage.

4. ***Training needs assessment***
Training needs assessment (TNA) will be decentralised to the individual activities level to assess their needs. For example, the specific training needs of operators in the woodwork activity will have to be clearly identified as the basis for determining and designing tailor-made training programmes to suit their specific needs.

5. ***Promotion of apprenticeship***
The idea behind the promotion of apprenticeship is to make it well established and increase its scale as one of the major means of skills acquisition in the informal sector.

(9) Entrepreneurship development

Alongside these strategies, there will be an entrepreneurship development programme aimed at creating a culture of entrepreneurship within society. The target groups will include:

- Pupils/students in the education system,
- Trainees in TEVET institutions,
- Out-of-school youth,
- Retrenches/retirees,
- Other potential entrepreneurs such as apprentices in the informal sector,
- Existing entrepreneurs within the informal sector.

An Entrepreneurship Development Unit has already been put in place within the Department of Technical Education and Vocational Training to spearhead the implementation of the Entrepreneurship Development programme. The main elements of this programme are:

- Entrepreneurship curriculum and materials development,
- Development of entrepreneurship training expertise,
- Popularising entrepreneurship positively,
- Developing sustainable institutional framework.

The strategies outlined above are seen as the most feasible and practical way of reaching out to the informal sector and ensuring its sustainability.

(10) Implementation constraints

Reaching out to the training needs of the informal sector will in the initial stages meet a few implementation constraints, including the following:

1. Rigidity of training institutions. As mentioned above, the existing public training institutions were established to meet the training needs of the formal sector. It will take some time before institutions adapt to a flexible approach to syllabus design, timetabling, and delivery of skills and attitudes in accordance with the ever changing demands of the informal sector.
2. Trainees' readiness to training. Informal sector operators may find it difficult to adjust to instructional routines, preferring to spend time on productive activities rather than on learning.
3. Trainees' capacity to pay. Some target groups may not afford the user fees to enable them to train, given that some of them dropped out of school for the same reason of lack of funds.
4. Post-training support services. At the moment, the supportive institutional framework for small-scale enterprises is not strong enough to encourage the growth of a well-trained small-enterprise sector. Problems of funding and credit, advisory services, physical infrastructure and market information (although outside the training environment) will have an adverse effect on training as they will be demotivators.

(11) Conclusions

This brief discussion paper has outlined the Technical Education, Vocational and Entrepreneurship Training Policy of the Republic of Zambia as it relates to training for the informal sector.

The policy is in place, but the strategies for implementing the policy have yet to be finalised before being piloted. It is hoped, however, that given the goodwill of both the government and its partners in the provision of technical education, vocational and entrepreneurship training, the new policy will have a positive impact on the productivity of the informal sector.

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Appendices

(A) The Daily Schedule

Monday	**15 September, 1997**
08.30 - 09:30	Registration of Participants
09:30 - 10:30	**Official Opening of the Seminar:** Secretary General, Kenya National Commission for UNESCO: Mr C. J. Chacha-Ogwe, Opening remarks UNESCO Consultant to UNEVOC: Prof. Dr R. Barry Hobart, Opening remarks **Guest of Honour** giving the **Official Opening Speech**: Prof. Shyem O. Wandiga
10.30 - 11:00	Informal get-to-know-you coffee/tea
11.00 - 12:30	Presentation of UNESCO/UNEVOC and of the Seminar Programme by Prof. Dr R. Barry Hobart
12.30 - 14:00	Lunch
14:00 - 15.00	**Presentation of a Position Paper** by Mr Peter Okaka, Director of Technical Training, Kenya Discussion focusing on important points, conclusions and making recommendations
15:00 - 15:30	Coffee/Tea
15:30 - 17.00	**Presentation of Papers** by Participants Discussion focusing on important points, conclusions and making recommendations
Tuesday	**16 September, 1997**
09.00 - 10.30	**Presentation of a Position Paper** by Prof. Dr B. Wanjala Kerre, Discussion **Presentation of Papers** by Participants Discussion focusing on important points, conclusions and making recommendations
10.30 - 11:00	Coffee/Tea
11:00 - 12.30	**Presentation of Papers** by Participants Discussion focusing on important points, conclusions and making recommendations
12.30 - 14:00	Lunch
14:00 - 15:30	**Presentation of Papers** by Participants Discussion focusing on important points, conclusions and making recommendations
15.30 - 16.00	Coffee/Tea
16:00 - 17:00	**Presentation of Papers** by Participants Discussion focusing on important points, conclusions and making recommendations
Wednesday	**17 September, 1997**
09.00 - 17.00	**Visits to Various JuaKali Institutions** (Non-formal sector) **Site Seeing**
19.00 - 21:30	Celebration Dinner
Thursday	**18 September, 1997**
09.00 - 10.30	**Presentation of Papers** by Participants Discussion focusing on important points, conclusions and making recommendations
10.30 - 11.00	Coffee/Tea
11.00 - 12.30	**Presentation of Papers** by Participants Discussion focusing on important points, conclusions and making recommendations
12.30 - 14.00	Lunch
14:00 - 15:30	**Presentation of Papers** by Participants Discussion focusing on important points, conclusions and making recommendations
15.30 - 16.00	Coffee/Tea
16.00 - 17.00	**Presentation of Papers** by Participants Discussion focusing on important points, conclusions and making recommendations
Friday	**19 September, 1997**
09.00 - 10:30	**Discussion by participants of a summary and of conclusions**
10:30 - 11:00	Coffee/Tea
11:00 - 12:00	**Summary presentation of conclusions and recommendations** by Prof. Dr R. Barry Hobart
12:00 - 12:30	**Evaluation of Seminar** by Participants
12:30 - 14:00	Farewell lunch

(B) Information Document

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(1) The Seminar

This activity was first recommended by the participants of a seminar for key personnel on "**Co-operation between educational institutions and enterprises in technical and vocational education**". That seminar was held in Berlin in May 1995. A comprehensive report of it is available from UNEVOC Berlin. It is titled "**Establishing Partnership in Technical and Vocational Education**". In response to that recommendation, the planning team of the UNEVOC Project incorporated this activity into the 1996-1997 UNEVOC Work Plan.

In order to focus the concept of this forthcoming subregional seminar, as much as possible, on to the needs of countries in the African region, it was discussed with high-level officials from Eastern and Southern Africa at the Subregional Workshop on "Financing and Management of Vocational Education and Training in Eastern and Southern Africa". This was held in Mauritius in March 1996.

Feedback received from those consulted indicated clearly that UNESCO/UNEVOC should focus the forthcoming policy definition seminar on a well-defined issue in this area of concern, rather than seek to cover a broad range of policy issues in technical and vocational education. It was suggested that this issue should be: **Technical and vocational education in the non-formal sector and its relationship with formal technical and vocational education**.

Such an approach accords fully with the Resolution 28 C/1.16, adopted in November, 1995, by the General Conference of UNESCO titled, "**Establishment through UNEVOC of links between the formal and informal educational and training sectors and the economy**". In this resolution, Member States invite the Director-General

- to promote ... the establishment of links between the formal and the informal educational and training sectors of the economy;
- to increase the number of workshops for those in charge of technical and vocational training in developing countries and countries in transition.

Technical and Vocational Education beyond the formal education system

The significance of this area of concern is given in the following quotation of Mr Federico Mayor, Director-General of UNESCO, given in a speech at the opening of the Etats Généraux de l'Education, in Kinshasa, Zaire, 20 January, 1996:

> *"The appropriateness and forward planning of vocational training with regard to employment possibilities is a basic principle that must guide technical and vocational training activities. This principle and the high cost of such training have important implications which require that the expansion of academic types of education be controlled. The restrictions this entails should be compensated for by giving more support to less formal training initiatives for craftsmen in the traditional sector – apprenticeship, functional literacy programmes, technical information, raising the level of general education, and management training. These approaches are often as helpful as genuine vocational training for these groups."*

In many countries, especially in Eastern and Southern Africa, the formal system of technical and vocational education cannot provide adequate training for those leaving general education institutions. Further, access to technical and vocational education is often limited to adults. Even graduates from formal technical and vocational education institutions are often unable to find adequate employment. In addition, they are frequently not equipped with the know-how and the material prerequisites to establish their own businesses. Thus, they are not able to contribute significantly to the alleviation of poverty and to sustainable development by creating and engaging in small-business enterprise.

Yet the generation of wealth from, and the significance of employment in, small-business enterprise is vital even in the more advanced economically developed countries. Therefore, the development of the human resources engaged in small-business enterprise is a major responsibility of technical and vocational education, especially of informal, or non-formal, technical and vocational education. National government policies, then, in technical and vocational education must be developed that support this area of human resource development, especially as it addresses the informal sector.

(2) Definition

Various patterns of technical and vocational education and training beyond the formal education system exist. They often refer to that type of economic and training activity as "informal" or "non-formal". They may be defined as contrasting to the formal system by the lack of legal regulation of activities, by the size of the enterprise, by capital intensiveness, or by the number of employees.

Irrespective of the variety of target groups and definitions in this field, for the purpose of this forthcoming seminar, it is useful to adopt the working definition that relates to the number of employees in the enterprise and that covers **training activities of micro and small enterprises that encompass a staff of less than fifty employees**.

(3) Objectives

The objectives of the seminar will therefore address this area of technical and vocational education. The overriding objective of the seminar will address the issues relating to **how technical and vocational education can reach those in the non-formal sector who were unable to develop relevant occupational skills through the formal education system.** Specifically, the following questions will be addressed:

- How can technical and vocational education and training reach those who were unable to develop relevant occupational skills through the formal education system?
- What are the competencies needed to be developed in those engaged in the informal enterprise sector of the economy?
- In what ways can the non-government sector of the employing economy be stimulated and encouraged to support this area of technical and vocational education and training?
- What infrastructures and administrative and management systems are needed to support informal, or non-formal, technical and vocational education?
- What are the potentially effective means of financing this area of technical and vocational education?
- How can technical and vocational education and training be linked to employment-generating and income-generating activities, particularly in the informal sector of the economy?
- How can governments intervene to stimulate such technical and vocational education and training activities and, at the same time, ensure the essential quality standards?

More specifically, with respect to the Government's role, the following questions will be addressed.

- What strategies can governments develop and implement:
  - to improve the base in general education?
  - to disseminate information about the various options for technical and vocational education?
  - to develop counselling and career guidance services?
  - to facilitate the inclusion of entrepreneurial skills into the curriculum?
  - to supplement the education and training process with supporting activities such as human resource consultancy services, technology transfer, or loan schemes for small businesses?
  - to redefine, where necessary, the roles of institutions that exist in the formal sector?
  - to define bridges to formal technical and vocational education for those who have been trained beyond the formal sector?
  - to develop the interfaces of technical and vocational education between the informal and the formal sectors with related programmes for economic and labour market development, e.g. in the fields of access to markets, or of banking schemes for loans for capital investment?

Within the context of the above questions, the seminar will:

- analyse various existing national set-ups with respect to technical and vocational education beyond the formal sector;
- examine the various national objectives that must be attained to achieve the above objectives;
- relate the objectives, principles and standards designed for this target group to those adopted for the formal sector;
- develop sets of principles and standards for government intervention to be applied.

Particular attention will be paid to consistency of policies with respect to the informal sector on the one side, and with the formal technical and vocational education on the other, so as to ensure a maximum of co-ordination, consistency and articulation between both subsystems. The general principles, goals and guidelines set forth in UNESCO's "Revised Recommendation Concerning Technical and Vocational Education" (1974) and in the "Convention on Technical and Vocational Education" (1989) will serve as a framework.

Crucial issues, such as gender, access, information and guidance, contents, delivery, personnel, certification, articulation, supervision, and financing, will be focused upon.

(4) National follow-up

It will be expected that participants will initiate national follow-up activities. While UNESCO will support such follow-up activities within its existing structures and mechanisms (such as the Participation Programme), responsibility for initiating the follow-up activities will basically remain with participants.

Participants will be requested to design their plans for national follow-up and to present them at the subregional seminar.

UNESCO will encourage regional co-operation in the context of national follow-up activities, e.g. by facilitating input from neighbouring countries.

(5) Participants

Potential participants have been selected from among key personnel of governmental as well as relevant parastatal and non-governmental institutions (e.g. with responsibility for development of small business in the informal sector, or for loans). Twenty-two such participants have been invited from thirteen neighbouring countries in the region.

(C) List of Main Participants

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(D) Convention on Technical and Vocational Education adopted by the General Conference of UNESCO

Preamble

The General Conference of the United Nations Educational, Scientific and Cultural Organisation, meeting at Paris from 17 October 1989 to 16 November 1989 at its twenty-fifth session,

Recalling that it is the Organisation's constitutional duty to promote and develop education,

Recalling also the principles set forth in Articles 23 and 26 of the Universal Declaration of Human Rights which relate to the right to work and to education, the principles contained in the Convention against Discrimination in Education, adopted in Paris on 14 December 1960, the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights, adopted in New York on 16 December 1966, as well as the Convention on the Elimination of All Forms of Discrimination against Women, adopted by the United Nations General Assembly on 18 December 1979,

Recognising that the development of technical and vocational education should contribute to the safeguarding of peace and friendly understanding among nations,

Having noted the provisions of the Revised Recommendation concerning Technical and Vocational Education, and the Recommendation concerning Education for International Understanding, Co-operation and Peace and Education relating to Human Rights and Fundamental Freedoms, both adopted by the General Conference at its eighteenth session in 1974,

Having noted further the provisions of the Recommendation on the Development of Adult Education, adopted by the General Conference in 1976, and the Recommendation concerning the Status of Teachers, adopted by the Special Intergovernmental Conference in 1966,

Taking into account the relevant recommendations of the International Conference on Education,

Bearing in mind the provisions of the Convention (No. 142) and Recommendation (No. 150) concerning Vocational Guidance and Vocational Training in the Development of Human Resources, adopted by the International Labour Conference at its sixtieth session in 1975,

Noting further the close collaboration between UNESCO and the International Labour Organisation in drawing up their respective instruments so that they pursue harmonious objectives and with a view to continuing fruitful collaboration,

Considering the need to make a special effort to promote the technical and vocational education of women and girls,

Paying special attention to the diversity of education systems and socio-economic and cultural conditions, in particular those in developing countries which need special considerations and provisions,

Considering that, in spite of this diversity, generally similar objectives are pursued and that similar problems arise in many countries, making it desirable to develop common guidelines in technical and vocational education,

Recognising that the pace of technological, social and economic development has considerably increased the need to expand and improve the technical and vocational education provided for both young people and adults,

Recognising that technical and vocational education meets the global aim of developing both individuals and societies,

Convinced of the need for the exchange of information and experiences in the development of technical and vocational education and of the desirability of strengthening international co-operation in this field,

Convinced of the utility of an international legal instrument to reinforce international collaboration in the development of technical and vocational education,

Adopts the present Convention this tenth day of November 1989:

Article 1

The Contracting States agree that:

a) for the purpose of this Convention 'technical and vocational education' refers to all forms and levels of the educational process involving, in addition to general knowledge, the study of technologies and related sciences and the acquisition of practical skills, know-how, attitudes and understanding relating to occupations in the various sectors of economic and social life;

b) this Convention applies to all forms and levels of technical and vocational education provided in educational institutions or through co-operative programmes organised jointly by educational institutions, on the one hand, and industrial, agricultural, commercial or any other undertaking related to the world of work, on the other;

c) this Convention shall be applied in accordance with the constitutional provisions and legislation of each Contracting State.

Article 2

1. The Contracting States agree to frame policies, to define strategies and to implement, in accordance with their needs and resources, programmes and curricula for technical and vocational education designed for young people and adults, within the framework of their

respective education systems, in order to enable them to acquire the knowledge and know-how that are essential to economic and social development as well as to the personal and cultural fulfilment of the individual in society.

2. The general framework for the development of technical and vocational education shall be determined in each Contracting State by appropriate legislation or other measures indicating:

a) the objectives to be attained in technical and vocational fields, taking into consideration economic, social and cultural development needs and the personal fulfilment of the individual;
b) the relationship between technical and vocational education, on the one hand, and other types of education, on the other, with particular reference to horizontal and vertical articulation of programmes;
c) the structures for administrative organisation of technical and vocational education defined by the responsible authorities;
d) the roles of the public authorities responsible for economic, social and development planning in the various sectors of the economy and, where applicable, of professional associations, workers, employers and other interested parties.

3. The Contracting States shall guarantee that no individual who has attained the educational level for admission into technical and vocational education shall be discriminated against on the grounds of race, colour, sex, language, religion, national or social origin, political or other opinions, economic status, birth, or on any other grounds.

The Contracting States shall work towards the right to equal access to technical and vocational education and towards equality of opportunity to study throughout the educational process.

4. The Contracting States shall pay attention to the special needs of the handicapped and other disadvantaged groups and take appropriate measures to enable these groups to benefit from technical and vocational education.

Article 3

1. The Contracting States agree to provide and develop technical and vocational education programmes that take account of:

a) the educational, cultural and social background of the population concerned and its vocational aspirations;
b) the technical and professional skills, knowledge and levels of qualification needed in the various sectors of the economy, and the technological and structural changes to be expected;
c) employment opportunities and development prospects at the national, regional and local levels;
d) protection of the environment and the common heritage of mankind;
e) occupational health, safety and welfare.

2. Technical and vocational education should be designed to operate within a framework of open-ended and flexible structures in the context of lifelong education and provide:

a) an introduction to technology and to the world of work for all young people within the context of general education;
b) educational and vocational guidance and information, and aptitude counselling;
c) development of an education designed for the acquisition and development of the knowledge and know-how needed for a skilled occupation;
d) a basis for education and training that may be essential for occupational mobility, improvement of professional qualifications and updating of knowledge, skills and understanding;
e) complementary general education for those receiving initial technical and vocational training in the form of on-the-job or other training both inside and outside technical and vocational education institutions;
f) continuing education and training courses for adults with a view, in particular, to retraining as well as to supplementing and upgrading the qualifications of those whose current knowledge has become obsolete because of scientific and technological progress or changes in the employment structure or in the social and economic situation, and also for those in special circumstances.

3. Technical and vocational education programmes should meet the technical requirements of the occupational sectors concerned and also provide the general education necessary for the personal and cultural development of the individual and include, inter alia, social, economic and environmental concepts relevant to the occupation concerned.

4. The Contracting States agree to tender support and advice to undertakings outside educational institutions which take part in co-operative programmes of technical and vocational education.

5. At each occupational level, the competence required must be defined as clearly as possible and curricula must be continuously updated to incorporate new knowledge and technical processes.

6. In assessing the ability to carry out occupational activities and determining appropriate awards in technical and vocational education, account should be taken of both the theoretical and practical aspects of the technical field in question, and this should apply both to persons who have received training and to persons who have acquired occupational experience in employment.

Article 4

The Contracting States agree to review periodically the structure of technical and vocational education, study programmes, plans, training methods and materials, as well as forms of co-operation between the school system and the world of work, so as to ensure that they are constantly adapted to scientific and technological progress, to cultural progress and to changing employment needs in the various sectors of the economy, and that advances in educational research and innovation are taken into account with a view to application of the most effective teaching methods.

Article 5

1. The Contracting States agree that all persons teaching in the field of technical and vocational education, whether working full time or part time, should have adequate knowledge, theoretical and practical, of their professional field of competence as well as appropriate teaching skills consistent with the type and level of the courses they are required to teach.
2. Persons teaching in technical and vocational education should be given the opportunity to update their technical information, knowledge and skills through special courses, practical training periods in enterprises and any other organised form of activity involving contact with the world of work; in addition, they should be provided with information on and training in educational innovations that may have applications in their particular discipline and be given the opportunity to participate in relevant research and development.
3. Equal employment opportunities should be offered, without discrimination, to teachers and other specialised staff in technical and vocational education and their employment conditions should be such that it is possible to attract, recruit and retain staff qualified in their areas of competence.

Article 6

To facilitate international co-operation, the Contracting States agree:

a) to encourage the collection and dissemination of information concerning innovations, ideas and experience in technical and vocational education and to participate actively in international exchanges dealing with study and teacher-training programmes, methods, equipment standards and textbooks in the field of technical and vocational education;

b) to encourage the use in technical and vocational education of international technical standards applied in industry, commerce and other sectors of the economy;

c) to promote approaches to achieving the recognition of equivalencies of qualifications acquired through technical and vocational education;

d) to encourage international exchanges of teachers, administrators and other specialists in technical and vocational education;

e) to give students from other countries, particularly from developing countries, the opportunity to receive technical and vocational education in their institutions, with a view, in particular, to facilitating the study, acquisition, adaptation, transfer and application of technology;

f) to promote co-operation in technical and vocational education between all countries, but in particular between industrialised and developing countries, in order to encourage the development of the technologies of the countries;

g) to mobilise resources for strengthening international co-operation in the field of technical and vocational education.

Article 7

The Contracting States shall specify, in periodic reports submitted to the General Conference of the United Nations Educational, Scientific and Cultural Organisation at the dates and in the form determined by it, the legislative provisions, regulations and other measures adopted by them to give effect to this Convention.

Article 8

The following provisions shall apply to those States Parties to this Convention which have a non-unitary constitutional system:

a) with regard to the provisions of this Convention, the implementation of which comes under the legal jurisdiction of the federal or central legislative power, the obligations of the federal or central government shall be the same as for those States Parties with a centralised system;

b) with regard to the provisions of this Convention, the implementation of which comes under the legal jurisdiction of federated States and constituent countries, provinces, autonomous communities or cantons that are not obliged by the general or basic constitutional system of the federation to take legislative measures, the central government shall inform the competent authorities of such States, countries, provinces, autonomous communities or cantons of the said provisions, with its recommendation for their adoption.

Article 9

Member States of UNESCO may becomes Parties to this Convention, as well as non-Member States of UNESCO which have been invited by UNESCO's Executive Board to become Parties, by depositing with the Director-General of UNESCO an instrument of ratification, acceptance, accession, or approval.

Article 10

This Convention shall enter into force three months after the third instrument referred to in Article 9 has been deposited, but solely with respect to the States that have deposited their respective instruments by that date. It shall enter into force for each other State three months after that State has deposited its instrument.

Article 11

1. Each Contracting State shall have the right to denounce this Convention by formal notification in writing to the Director-General of the United Nations Educational, Scientific and Cultural Organisation.
2. The denunciation shall take effect 12 months after the notification has been received.

Article 12

The Director-General of the United Nations Educational, Scientific and Cultural Organisation shall inform the Member States of the Organisation, the non-Member States covered by Article 9 and also the United Nations of the deposit of all the instruments referred to in Article 9 and the denunciations provided for in Article 11.

Article 13

1. This Convention may be revised by the General Conference of the United Nations Educational, Scientific and Cultural Organisation. Such revision shall, however, be binding only on States Parties to the revised Convention.
2. Should the General Conference adopt a new Convention entailing a total or partial revision of this Convention, and unless the new Convention otherwise provides, this present Convention shall cease to be open to new States Parties from the date of entry into force of the new revised Convention.

Article 14

This Convention has been drawn up in Arabic, Chinese, English, French, Russian and Spanish, the six texts being equally authoritative.

Article 15

In conformity with Article 102 of the Charter of the United Nations, this Convention shall be registered with the Secretariat of the United Nations at the request of the Director-General of the United Nations Educational, Scientific and Cultural Organisation.

Done in Paris, this sixteenth day of November 1989, in two authentic copies bearing the signature of the President of the twenty-fifth session of the General Conference and of the Director-General of the United Nations Educational, Scientific and Cultural Organisation, which shall be deposited in the archives of the United Nations Educational, Scientific and Cultural Organisation, and certified true copies of which shall be delivered to all the States referred to in Article 9 as well as to the United Nations.